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FRONTISPIECE.

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THE SIXTH EDITION.

A

CONCISE TREATISE

ON THE

ART OF ANGLING,

Confirmed by actual Experience;

INTERSPERSED WITH

SEVERAL NEW AND RECENT DISCOVERIES;

THE WHOLE FORMING

A COMPLETE MUSEUM

FOR THE

LOVERS OF THAT PLEASING AND RATIONAL

RECREATION.

By THOMAS BEST,

Author of Matilda, and other Poems.

As in successive course the seasons roll,
So circling pleasures recreate the soul:
When genial spring a living warmth bestows,
And o'er the year her verdant mantle throws,
No swelling inundation hides the ground;
But chrystal currents glide within their bounds;
The finny brood their wonted haunts forsake,
Float in the sun, and skim along the lake;
With frequent leap they range the shallow streams,
Their silver coats reflect the dazzling beams.
Now let the fisherman his toils prepare,
And arm himself with ev'ry wat'ry snare;
His hooks, his lines peruse, with careful eye,
Increase his tackle, and his rod re-tie.

GAY.

THE SIXTH EDITION,

Carefully revised.

LONDON:

Printed by Barnard and Sultzer, Water Lane, Fleet Street,

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LUDGATE STREET.

1804.

ADDRESS TO THE PUBLIC.

THE credit of this treatise is so fully established by the approbation the former editions have met with, that it would be quite superfluous to say any thing more in its favour. In the present edition, which has been revised with the greatest attention, I have been careful to avoid all *new-fangled rules*, but have endeavoured to render those which I have before laid down more conspicuous and intelligent. Most of the late publications on this pleasing and rational recreation may allure by their novelty for awhile, but are in general so vague and full of error, that, like summer insects, pereunt et imputantur, *they must*

perish and be thought on no more!—Hoping the present edition will be well received by all judicious and discriminating Anglers, I shall conclude with observing

——Si quid novisti rectius istis
Candidus imperti; si non, his utere mecum.

Or "Better precepts, if you can impart
Why do—I'll follow them with all my heart."

I AM,

THE PUBLIC'S

MOST OBEDIENT

HUMBLE SERVANT,

THOMAS BEST.

**Tottenham Hale,* 1804.

* Excellent reception for Anglers at Brother Partrick's in that village.

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THE

THE ART OF ANGLING.

PART I.

CHAP. I.

A DESCRIPTION OF FISHES, ACCORDING TO NATURAL HISTORY, WITH THE BEST METHODS OF BREEDING, FEEDING, *&c.*

FISHES in natural history are animals that live in the water, as their proper place of abode. Naturalists observe a world of wisdom and design in the structure of fishes, and their conformation to the element they reside in.

Their bodies are cloathed and guarded in the best manner, with scales or shells, suitable to their respective circumstances, the dangers they are exposed to, and the motion and business they are to perform.

The centre of gravity is placed in the fittest part of the body of swimming, and their shape most commodious for making way through the water, and most agreeable to geometrical rules.

They have several parts peculiar to themselves; as fins, to balance and keep them upright; an air bladder, or swim, to enable them to rise or sink to any height or depth of water, at pleasure; gills or *branchiæ*, whereby they respire, as land

animals do by lungs; the tail, an instrument of progressive motion, which serves to row them forward; eyes peculiarly formed to enable them to correspond to all the convergencies and divergencies of rays, which the variations of the watery medium, and the refractions thereof may occasion, in which respect they bear a near resemblance to birds.

Fishes are distinguished into sea, or salt water fish, *pisces marini;* as the whale, herring, mackarel, &c. river or fresh water fish, *pisces fluviales:* as the pike, trout, &c. and pond or lake fish: as the carp, tench, &c. to which may be added, others which abide indifferently in fresh water, or salt; as salmon, shad-fish, &c.

There are also an *amphibious* kind, which live indifferently on land or water: as the castor, otter, &c.

Aristotle, and after him Mr. Willoughby, more accurately distinguish *fishes* into *cetaceous, cartiliganous,* and *spinous.*

The *cetaceous* kind, called also *belluæ marinæ,* have lungs, and breathe like quadrupeds; they copulate also like them, and conceive and bring forth their young alive, which they afterwards suckle with their milk.

The *cartiliganous* sort are produced from large eggs, like birds; which are also excluded the womb like those of birds.

The *spinous* kind are also oviparous; but their eggs are smaller, and they have spinæ up and down their flesh to strengthen it.

Willoughby thinks it would be yet more proper to divide *fishes* into such as *breathe with lungs* and such as *breathe with gills;* and then to subdivide those that breathe with gills, not into

cartiliginanous and spinous, but into *viviparous* and *oviparous*.

The *viviparous* kind, that breathe *with gills*, he subdivides into *long*; such as the *galei* and *canes*, or sharks and dog *fish*: and broad; such as the pastinaca, raja, &c. &c. the subdivisons of each whereof, he gives in his chapter of cartiliganous *fishes* in general.

The *oviparous* kind, that breathe *with gills*, are the most numerous; and these he subdivides into such as are what we usually call *flat fish*; and such as swim with their backs upright, or at right angles to the horizon.

The *plain* or *flat fish* kind, called usually *plani spinosi*, are either *quadrati*, as the *rombi* and *passeres*, or those of the turbot and flounder kind; or *longiusculi*, as the *solæ*, or sole kind

Such as swim *with their backs erect*, are either long and smooth, and without scales, as the eel kind, or shorter and less smooth; and these have either but one pair of fins at their gills, which are called *orbes* and *congeneres*, or else another pair of fins also on their bellies; which latter kind he subdivides into two kinds: 1. Such as have *no prickly fins on their backs*, but soft and flexible ones. 2. Such as have *prickly fins* on their backs.

Those *fishes* which have only soft and flexible fins on their backs, may be divided into such as have *three*, *two*, or but *one* single *fin* there.

No fish but the aselli have *three fins* on their backs.

Fishes with *two fins* on their backs, are either the truttaceous, trout kind; or the gobionites, loch, or gudgeon kind.

Fishes with but *one soft back fin*, are of three sorts.

sorts. The first kind have one long continued fin, from head to tail, as the hipparus of Rondeletius, &c.

The second have their fin but short, and placed just in the middle of their back; and these are either *marine*, as the herring kind; or *fluviatile*, as those we call leather-*mouthed fishes*; such as carp, tench, &c.

Fishes with *prickly fins on their backs*, are of two kinds. Such as have *two prickly fins on their backs*; and in these the interior radii of their fins are always prickly. 2. Such as have but *one prickly fin* there.

The English fishes that we have in our ponds, rivers, &c. are as follow: 1. *Cyprinus*, the Carp. 2. *Tinca*, the Tench. 3. *Cyprinus latus*, the Bream or *Bruma*. 4. *Orfus germanorum*, the Rudd, Oerve, or Nersling. 5. *Capito, seu Cephalus* the Chubb, or Chevin. 6. *Barbus*, the Barbel. 7. *Leucissus*, the Dace, or *Dare*. 8. *Rutilus seu Rubellio*, the Roach. 9. *Alburnus*, the Bleak, or Bley. 10. *Gobius fluviatilis*, the Gudgeon. 11. *Cobites fluviatilis barbatula*, the Loche, or Loach. 12. *Varius, seu phoxinus lævis*, the Pink, or Minnow.

These twelve are called *Malacostomi*, or leather-mouthed fishes; because they have no teeth in their jaws, but only deep down in their mouths. To proceed. 13. *Passer fluviatilis, sive amphibious*, the Flounder. 14. *Anguilla*, the Eel. 15. *Gobio fluviatilis*, the Bull-head, or Miller's Thumb. 16. *Thymallus*, the Gragling, Grayling, or Umber. 17. *Salmo*, the Salmon. 18. *Trutta fluvirtilis duum generum*, the Trout. 19. *Albula salmoni similis*, the Guinniad. 20. *Trutta Salmonata*, the Salmon Trout. 21. *Trutta Lacustris*,

custris, the Scurf, or Bull Trout. 22. *Umbla minor Gesn,* the Red Charr, or Welch Torgoch. 23. *Carpio lacus Benaci,* the Guilt, or Gilt Charr. 24. *Lucius,* the Pike, or Pickerel. 25. *Perca fluviatilis, minor seu aurata,* the Ruff. 26. *Piscis aculeatus vulgaris, seu pungitius Alberti,* the Common Prickle Back, Sharpling, or Banstickle. 27. *Piscis Aculeatus minor,* the Lesser Prickle Back. 28. *Perca fluviatilis,* the Perch.

The share of life which some fish possess, is worthy the notice of every curious angler.—The eel, being cut in pieces, maintains life and motion for several hours. A carp will move vigorously some time after the intestines are taken out of its body; but I shall say more on several of these heads in treating of each particular species of fish.

Fish, considered as a food, make a considerable addition to the furniture of the table; and the breeding, feeding, &c. thereof, is a peculiar art, and very necessary, for the sake of economy, that every country gentleman should know something of the method. To this relate the ponds, stews, &c. which shall be described in their proper places.

It may not be here unacceptable to give the reader some general rules on the subject.

RULE I.

FOR BREEDING FISHES.

The quality of the pond, water, &c. proper to this end, is scarcely determinable by any certain symptom or rule: for some very promising ponds do not prove serviceable that way. One of the best indications of a breeding pond, is when there is a good store of rushes and grazing about it, with

with gravelly shoals; such as horse-ponds usually have; so that when a water takes thus to breeding, with a few *Milters* and *Spawners*, two or three of each, a whole country may be stocked in a short time. Eels and perches are of a very good use to keep down the stock of fish; for they prey much upon the spawn and fry of bred fish, and will probably destroy the superfluity of them. As for pikes, tenches, roaches, perches, &c. they are observed to breed almost in any waters, and very numerously; but eels never breed in standing waters that are without springs, and in such are neither found, nor increase by putting in; yet where springs are they are never wanting, though not put in. And, what is most strange of all, no person ever saw in an eel the least token of propagation, either by *milt* or *spawn*; so that, whether they breed at all, and how they are produced, are propositions equally mysterious, and never yet clearly resolved.

RULE II.

FOR FEEDING FISHES.

Observe the following remarks:—1. In a *Stew* thirty or forty carps may be kept from October to March, without feeding; and by fishing with *trammels* or *flews*, in March or April, you may take from your great waters to recruit your stews: but you must not fail to feed all the summer, from March to October again, as constantly as cropped chickens are fed; and it will prove profitable.

2. The constancy and regularity of serving the fish, conduces very much to their eating well and thriving.

3. Any

3. Any sort of grain boiled is good to feed with, especially pease and malt coarse ground: the grains after brewing, while sweet and fresh, are very proper; but one bushel of malt, not brewed, will go as far as two of grains: chippings of bread, and orts of a table, steeped in tap-droppings of strong beer, or ale, are excellent food for carp. Of these the quantity of two quarts to thirty carps is sufficient; and so fed morning and evening, is better than once a day only.

There is a sort of food for fishes, that may be called accidental, and is no less improving than the best that can be provided; and this is when the pools happen to receive the waste of commons where sheep have pasture; the water is enriched by the soil, and will feed a much greater number of carp than it otherwise would do; and further, the dung that falls from cattle standing in the water in hot weather, is also a very great nourishment to fish.

The best food to raise pikes to an extraordinary size or fatness, is eels: and without them is not to be done, but in a long time. Setting these aside, small perches are the best meat. Breams put into a pike pond, breed exceedingly, and are fit to maintain pikes; who will take care they do not increase over much. The numerous fry of roaches, and other small fish, which come from the greater pools into the pike quarters, will likewise be good diet for them. Pikes in all streams, and carp in all hungry springing waters, being fed at certain times, will come up, and take their meat almost from your hand.

The best feeding-place is towards the mouth of the pond, at the depth of about half a yard; for by that means the deep will be kept clean and neat;

neat; the meat thrown into the water, without other trouble, will be picked up by the fishes, and nothing be lost: yet there are several devices for giving them food, especially pease: as a square board let down with the pease upon it.

Where fishes are fed in large pools or ponds, when their numbers are great, malt boiled, or fresh grains, is the best food. Thus carp may be fed and raised like capons, and tenches will feed as well, but perches are not for a *stew* in feeding time.

As to the benefits that redound from keeping fish, besides furnishing the table, and raising money, your land will be improved, so as to be really worth, and yield more this way than by any other employ whatsoever. For suppose a meadow of *two pounds per acre;* four acres in pond, will return every year a thousand fed carps, from the least size to fourteen or fifteen inches long; besides Pikes, Perches, Tenches, and other fry: the Carps are saleable, and will bring *sixpence, ninepence,* and perhaps *one shilling* each, amounting in all to *twenty-five pounds,* which is *six pounds five shillings per acre.*

You should make choice of such a place for your pond, that it may be refreshed with a little rill, or with rain-water running or falling into it; by so doing fish are both more inclined to breed, and are refreshed and fed the better.

There are many circumstances that conduce much to the feeding of *Pikes, Perches, Chubs, Carps, Roaches, Daces,* and *Breams,* particularly conveniency of harbor, for those fish that lie amongst weeds and boggy places are the fattest, though not the sweetest; in these kind of places they are secured from the assaults of their numerous

rous enemies, and enjoy a more safe and contented repose; rest and quietness being as natural and helpful to their feeding as to other creatures. Some waters are more nourishing than others; a thick kind, if it is not foul or muddy, is of a better consistency, and the parts better disposed and qualified for nutrition than those of a more thin and rarified substance; no element that is pure, and without mixture, is well adapted for nourishment, neither can fishes live by pure water, respiration, or sucking in those slender particles of their beloved element alone, without the concurrence and assistance of some grosser and terrene qualities, which are intermingled with those liquid bodies.

Having mentioned that fishes are exposed to numerous enemies, I shall conclude this chapter by giving the reader a poetical enumeration of them.

A thousand foes the finny people chace,
Nor are they safe from their own kindred race:
The Pike, fell tyrant of the liquid plain,
With rav'nous waste devours his fellow-train;
Yet, howsoe'er with raging famine pin'd,
The Tench he spares, a salutary kind.
Hence too the Perch, a like voracious brood,
Forbears to make this gen'rous race his food;
Tho' on the common drove no bound he finds,
But spreads unmeasur'd waste o'er all the kinds.
Nor less the greedy Trout and glutless Eel,
Incessant woes, and dire destruction deal.
The lurking Water-rat in caverns preys;
And in the weeds the wily Otter slays.
The ghastly Newt, in muddy streams annoys;
And in swift floods the felly Snake destroys;
Toads, for the shoaling fry, forsake the lawn;
And croaking Frogs devour the tender spawn.
Neither the 'habitants of land nor air,
(So sure their doom) the fishy numbers spare!

The Swan, fair regent of the silver tide,
Their ranks destroys and spreads their ruin wide:
The Duck her offspring to the river leads,
And on the destin'd fry insatiate feeds:
On fatal wings the pouncing Bittern soars,
And wafts her prey from the defenceless shores;
The watchful Halcyons to the reeds repair,
And from their haunts the scaly captives bear;
Sharp Herns and Corm'rants too their tribes oppress,
A harrass'd race peculiar in distress;
Nor can the Muse enumerate their foes,
Such is their fate, so various are their woes!

CHAP. II.

THE BEST MANNER OF MAKING AND CHUSING RODS, LINES. HOOKS, &c.

THE best time to provide stocks is in the winter solstice, when the trees have shed their leaves, and the sap is in the roots; for after January the sap ascends again into the trunk and branches, at which time it is improper to gather stocks or tops. As for the stocks, they should be lower grown, and the tops the best rush ground shoots that can be got; not knotty, but proportionable and slender, for if otherwise they will never cast nor strike so well, and the line, by reason of their unpliableness, must be much endangered; now when both stock and top are gathered in one season, and as strait as possible to be got, bathe them over a gentle fire, and never use them till they are well seasoned, which will be in one year and four months, but longer keeping them will make them better: and for preserving them when made into rods, both from rotting and being worm-eaten, rub them over thrice a year with

with sallad, or linseed oil; if they are bored pour in either of the oils, and let them soak therewith for twenty-four hours, then pour it out again, and it will preserve them from the least injury. In general the length of the rod is to be determined by the breadth of the river you angle in; but a long rod is always of more use than one too short, provided it is truly made: one of about five yards and a half long you will experimentally find to be quite sufficient. When you have taken your stocks and tops from the place that you put them in for seasoning (where they must have remained sixteen months at least), match them together in just proportion; and let the rod consist of five or six pieces; if you ferrel it, observe that they fit with the greatest nicety, and in such a manner as when put all together they may not wriggle in the least, but be in proportion, and strength, as if the whole rod were but one piece. If you bind them together, it must be with thread strongly waxed, having first cut the pieces with a slope, or slant, that they may join each other with the greatest exactness, and then spread a thin layer of shoemakers' wax over the slants, or a glue, which I have set down in the *arcana* for the angler's use; afterwards you must cut about six inches off the top of the rod, and in its place whip on a smooth, round and taper piece of whalebone, and at the top of that a strong loop of horsehair; then the whole will be completed, and thus made will always ply with a true bent to the hand. Your fly rods may be made in the same manner; but note, must be much more pliant than the others, and more taper from stock to top. It is of service to them to lay by some time before you use them.

Your

Your top for the running line must be always gentle, that the fish may the more insensibly run away with the bait, and not be checked by its being too stiff.

For all fishes that bite tenderly a rod made of cane, reed, or bamboo, is the best, only be careful when you chuse such a one that it will strike well, and that the medium between the ferrel and the joint that goes in, is not cut too fine; for if it is, when you strike a good fish, it is ten to one you will lose some part of your rod, your line, and of course the fish; a misfortune that has often happened to me, before I was acquainted with the above rule.

A general rod, is one which serves for trolling, dibbing, and the ground; for the former purpose small brass rings must be whipped all the way up it, at about a foot distance, for the trolling line to run through; it may likewise be bored in the stock to hold the tops you are not using; that which you use for the troll must be strong, and have a ring on the top whipped on with a piece of quill, to prevent the line being cut, when the voracious pike runs off with your bait to his hold: one of the others must not be so stiff, which will serve for carps, tenches, &c. and the other fine and elastic for dace and roach fishing. These kind of rods, which are called *bag-rods,* and go up in a small compass, are to be had at all the Fishing-tackle shops in London; more particularly in Crooked Lane, near the Monument; Fleet Street; Bell Yard; also an excellent shop facing Southampton Street, Strand.

Angling Line. To make this line, first note, that you are to take care that your hair be round and clear, and free from galls, scales, or frets; for

for a well-chosen, even, clear round hair, of a kind of glass-colour, will prove as strong as three uneven scabby hairs; then put them in water for a quarter of an hour, when made into lengths, and you will thereby find which of them shrink; then twist them over again; some in the twisting intermingle silk, which is erroneous: yet a line of all silk may do pretty well, though I prefer hair in every mode of angling, except trolling, and then a silk line is best. Now the best colours for lines are sorrel, white, and grey; the two last colours for clear waters, and the first for muddy waters, neither is the pale watery green despicable, which is made thus: put a pint of strong alum water, half a pound of soot, a small quantity of juice of walnut leaves, into a pipkin, boil them about half an hour, then take it off the fire, and when it is cold steep your hair in it: or else boil an handful of marygold flowers, with a quart of alum water, till a yellow scum arises, then take half a pound of green copperas, with as much verdigris, and beat them together to a fine powder, and put them and the hair into the alum water, and let them lie in it ten hours or more, then take them out and let them dry. Hair is made brown by steeping it in salt and ale. The best way of forming the hair into lines, is with a new-invented engine, to be bought at any of the shops, and is to be used thus. To twist links with this engine, take as many hairs as you intend each shall consist of, and dividing them into three parts, tie each parcel to a bit of fine twine, about six inches long, doubled, and put through the hooks which impend from the machine: then take a piece of lead of a conical figure two inches high, and two in diameter at the base, with a hook at the *apex*,

or

or point; tie your three parcels of hair into one knot, and to this by the hook hang the weight.

Lastly, Take a common bottle cork, and into the sides, at equal distances, cut three grooves; and placing it so as to receive each division of hairs, begin to twist. You will then find the links twist with great evenness at the lead: as it grows tighter shift the cork a little upwards, and when the whole is sufficiently twisted, take out the cork, and tie the links into a knot, and so proceed till you have twisted links sufficient for your line, observing to lessen the number of hairs in each link, in such proportion that the line may be taper.

Never strain your hairs before they are made into a line, if you do they will shrink when used.

Your links thus prepared, tie them together into a water knot; then cut off the short ends, about a straw's breadth from the knot, and then whip some waxed silk about the knots, which is much better than inclosing them with wax.

Never, either at ground or fly angling, fix any hooks to a line that consists of more than three or four links at the most; but always make a small loop at the top and bottom of your line; the use of the one is to fasten it to your rod, and of the other, to affix or remove your *armed hooks*. The line should always be leaded according to the rapidity or quietness of the river you angle in; therefore, as nearly as you can guess, always lead it in such manner as will sink the bait to the bottom, and permit its motion, without any violent jogging on the ground. Carry the top of your rod even with your hand, beginning at the head of the stream, and letting the bait run downwards, as far as the rod and line will permit, the lead dragging and rolling on the ground. No more of the line must

be

be in the water than will permit the lead to touch the bottom; for you are to keep the line as strait as possible, yet so as not to raise the lead from the bottom. When you have a bite, you may perceive it by your hand and the point of your rod and line: then strike gently and upwards, if you cannot tell which way the fish's head lies; but if you can, the contrary way from where it does; first allowing the fish, by a little slackening the line, a small time to pouch the bait. This is called angling by hand, and is very killing for trout, grayling, &c.

I shall treat of *Float Fishing* under the description of each fish.

As for your *Fishing Hooks*, they ought to be made of the best tempered steel wire, longish in the shank, and somewhat thick in the circumference, the point even, and strait; let the bending be in the shank. For setting on the hook, or more scientifically speaking, *arming it*, use strong but small silk, lightly waxed with shoemakers' wax; and lay the hair on the inside of the hook, for if it be on the outside, the silk will fret and cut it asunder. There are several sizes of hooks, large ones and small ones, made according to the fishes they are designed to take, which, when I come to treat of the different fish, the number of the hook proper for each will be fully expressed.

Ford and *Kirby's* hooks are excellent one's, but the best I ever had were from *Red-bridge* in *Hampshire*.

Floats, for angling, are of divers kinds: some made of *Muscovy Duck* quills, which are the best for slow waters; but for strong streams, sound cork, without flaws or holes, bored through with an hot iron, into which is put a quill of fit proportion,

portion, is preferable; pare the cork to a a pyramidal form, grind it smooth with a pumice stone, then colour it according to your fancy. Floats, whether quill or cork, must be poised with shot, when on the line, as to make them cock; that is, stand perpendicular in the water, that the least nibble or bite may be apparent.

When a float is split or bruised, there is no remedy for the mischance, but getting a new one; but you may save the plug, and it will serve for another. But if the water gets in at the top of your float, a little sealing-wax will prevent it; if the plug of your float is loose, pull it out, and fasten it with the following cements.

Take *bee's wax* bruised small, *chalk* scraped fine, and *black rosin* powdered, of each an equal quantity; melt them in a spoon, or any small tin vessel, and see that they are well mixed; or, take *brick-dust* sifted very fine, and common *rosin*, pulverised; put one part of *brick-dust* to two parts of *rosin*, and melt them as before directed; dip your plug in either of these, and put your float immediately upon it. When you join two floats together, let the plug be a little thicker in the middle than at the ends, which ends are to go into the quills; dip one end into the cement, and put one quill upon it; then do the like by the other, and you have a double float: or, you may make it by dipping the ends of both quills, when prepared, in the cement, and fixing them together, which, when the cement is cold, will be very strong.

To dye quills red, which for still waters are better than any other floats, take what quantity you please of *urine*, and put in it as much powder of *Brazil wood* as will make it redden a piece of white paper; then take some clean water, into which

which put an handful of *salt*, and a little *argol*, and stir them till dissolved: then boil them well in a sausce-pan. When the water is cold, scrape your quills, and steep them in it for ten or twelve days, then dry them, and rub them with a woollen cloth.

The materials most necessary for an angler to have out with him, and which may be well carried in his pockets, are, *lines* coiled up. *Spare links.* Two worm bags, one for *brandlings*, &c. and the other for *lob-worms*. *A plummet* to fix the depth of the water, of a pyramidal form. *A gentle box*. *Floats* and *spare caps*. *Split shot*. *Shoe-makers wax* in a piece of leather. *Silk*. *Hooks*, some whipped on and some loose. *A clearing ring*, which is of use to disengage the hook when entangled. *A landing net*, to land large fish with. *The disgorger*, which when a fish has gorged the hook, by putting it down his throat, till you touch the hook, at the same time pulling the line, it will easily come away.

CHAP. III.

THE GENERAL BAITS USED IN ANGLING, WHERE FOUND, AND HOW PRESERVED.

THE reader being furnished with the best rules relative to his *rods, lines, hooks*, &c. I shall give him a list of the baits in general of use in angling; but must desire him to observe, that fish take all sorts of baits, most eagerly and freely, when he presents them to them in such order and manner, as nature affords them, or as they themselves generally gather them.

The Lobworm, Dew-worm, Garden-worm, Twatchell, or Treachet,

Found in a garden or church-yard, late in a summer's evening, with a lanthorn; when the summer proves a very dry one, they may be forced out of their holes with the liquor produced by bruising walnut-tree leaves in water: the best of these are those which have a red head, a streak down the back, and a broad tail, from which they derive the name of *squirrel-tails*.

This is a principal worm for *Salmon, Chub, Trout, Barbel,* and *Eels* of the largest size.

Brandlings, Gilt-tails, and Red-worms,

Found in old dunghills, rotten earth, cows dung, hogs dung; but the best are those to be met with in tanners bark after it is thrown by.

These, especially the two first, are for *Trouts, Grayling, Salmon-smelts, Gudgeon, Perch, Tench,* and *Bream*; the three last take the *red-worm,* well-scoured, exceedingly well.

Marsh, or Meadow-worm,

Found in marshy ground, or the ferrile banks of rivers; are a little blueish, require more scouring than the brandling or gilt-tail, and are taken from Candlemas until Michaelmas.

This is a choice worm in *March, April,* and *September,* for *Trouts, Salmon-smelts, Gudgeon, Grayling, Flounder, Bream,* and *Perch.*

Tag-tail,

Found in marled lands, or meadows after a shower of rain, or early in the morning in March

or

or April, if the weather is mild and temperate; and is a most excellent bait.

This is an excellent bait for a *Trout*, if you angle with it whilst the water is discoloured by rain.

How to scour and preserve Worms.

Get a quantity of moss, the best is that which is soft and white, and grows on heaths, but as this is scarce to be had in some parts, in lieu of it any kind that is fresh and sweet; rinse it well from the earth that hangs about, and then wring it very dry, put your worms, and it, into an earthen pot, cover it close that they do not crawl away, and set it in a cool place in summer, and and in winter in a warm one, which will prevent the frost from killing them: change the moss every fourth day is summer, and once a week in winter, or at least let the old moss be taken from them, washed, squeezed pretty dry, and put it to them again. If you want them to be quickly scoured, a little *bole-armoniac* put to them will accomplish your desire: or you may put them in water for three or four hours, and they will soon be scoured, yet be very weak, but being put to good moss, they will speedily recover. When the knot near the middle of the *brandling* begins to swell, he is sick; and for fear they should die, feed them with crumbs of bread, and with the yoke of an egg and sweet cream coagulated over the fire; never steep your worms in moss to scour them above ten days, in which time they will be perfectly fit for use.

There is another way of cleansing and preserving *worms*, recommended by many anglers, and is a very good one for every kind of them except the *lob-worm*: take a piece of very coarse cloth,

which has never been shrunk in the *Fulling-mill*, wash it very clean, and let it dry: then soak it in the liquor where a fat piece of fresh beef has been boiled, and wring it out, but not so hard as to press out all the liquor; then lay it in a deep earthen pan, that has a large bottom, and put your worms thereon, that they may crawl in and out and so scour themselves: when they have remained there twenty-four hours, wash out your cloth as before, but do not dry it; then wet it again with some of the same liquor, and having placed your worms thereon, keep them in a close cellar; repeat this every other day during the heat of the summer, and you will not only preserve your worms alive for three weeks or a month, but make them very red, clear, and tough. When you take them out for angling, put them into moss that has been well washed and not wrung dry; and when you come home at night put them again into the pan, by which they will recover and gather fresh strength; take care that there is no salt in the beef liquor, for if there is your worms will purge themselves to death.

Mr. *Gay* in his Rural sports, is particularly partial to the *Gilt-tail;* as is apparent by the following lines.

> You must not ev'ry worm promiscuous use,
> Judgment will tell the proper baits to chuse;
> The worm that draws a long immod'rate size
> The trout abhors, and the rank morsel flies;
> And if too small, the naked fraud's in sight,
> And fear forbids while hunger does invite.
> Those baits will best reward the fisher's pains,
> Whose polish'd tails a shining yellow stains:
> Cleanse them from filth, to give a tempting gloss,
> Cherish the sully'd reptile race with moss.

Amid

Amid the verdant bed, they twine, they toil,
And from their bodies wipe their native soil.

Palmer-fly, Palmer-worm, Wool-bed, or Cankers,

Found in herbs, plants and trees, where they are bred, if not a perfect caterpillar, yet undoubtedly a species thereof; they gain the name of wool-beds from their outward parts being woolly; these and the May-fly are the foundation of *fly angling*.

These are good baits either for *Trout, Chub, Grayling, Roach,* or *Dace.*

Bobs,

Found in sandy and mellow ground, and got by following the plough in Autumn, are worms as big as two maggots, have red heads, and their bodies full of soft guts: put them in a tub with some of the mould that you gather them in, keep them in a warm place, and they are an excellent bait from the first of November till the middle of April: you may boil them the morning you intend angling, in milk and water for two minutes, which will make them tough; and put them in a box where gum ivy has been rubbed.

These are choice baits, from the beginning of *November* until after the middle of *April,* for *Chub, Roach, Dace, Salmon-smelts, Trout, Bream, Tench,* and *Carp.*

Cow-turd Bob, or Clap-bait,

Found under a cow-turd from the beginning of May to Michaelmas; it is bigger than a gentle, but very like one; it is best kept in the same earth you find it in.

This is an excellent bait for a *Trout*, if you angle with it on the top of the water, with a bristled hook.

Flag-worms, or Dock-worms,

Found among flags, in old pits or ponds, in little husks among the strings or fibres of the roots; are small worms, pale, yellow, or white, as a gentle: these are very good baits.

These are excellent baits for *graylings, tench, bream, carp, roach,* and *dace.*

Back-worm, or Ash-grub,

Found under the bark of an oak, ash, elder, or beech, especially when felled, and they have lain sometime, or in the hollow of those trees when dotted and rotten; it is to be used from Michaelmas to May or June. It is very full and white, bent round from the tail to the head; and the parts resembling a young dor or humble-bee.

This is an excellent bait for *Trout* and *Grayling*; it is very tender, and curious to be baited with.

Cod-bait, Cad-bait, Cadis-worm, or Case-worm, are thus differently called, and are of three Sorts.

1st. Found under stones that lie loose and hollow, in small brooks, shallow rivers, or very fine gravel, in case or husk, and when fit for use they are yellowish, are bigger than a gentle, with a blackish head. Another sort is found in pits, ponds, ditches, in rushes, water-weeds, straw, &c, called

called ruff-coats, or straw-worms. The next is a green sort, found in pits, ponds, or ditches, in March, coming in before the yellow ones, which are not to be fished with till April, and in July they go out of season; the last sort is to be used in the month of August. When you take them to fish with, carry them in woollen bags, for the air kills them.

These are excellent baits for all kinds of fish, particularly a large *Chub*.

Gentles, or Maggots, to breed and preserve.

Take a piece of beast's liver, scotch it with a knife, and with a cross stick, hang it in some corner, over a pot or barrel, half full of dry, crumbled clay, and bran or sand; as the gentles grow big, they will fall into the barrel, and scour themselves, and be always ready for use whenever you are inclined to fish; and these gentles may be thus created till after Michaelmas. But if you desire to keep gentles all the year, then get a dead cat, or kite, and let it be fly-blown, and when the gentles begin to be alive and stir, then bury it and them in moist, or soft earth, but as free from frost as you can, and these you may dig up at any time when you want to use them; these will last to March, and about that time turn into flies.

Gentles are not only the most universal, but also the most alluring bait, and an angler should never go out a fishing, without taking some with him. Trouts have been taken with them, when they have refused all kinds of worms and artificial flies: to every kind of fish they are an acceptable bait, (*Pikes* and *Salmons* excepted) but I do not doubt they would be so to them, were it

sle ; these are a deadly bait for roach, dace, and chub ; you must angle with them under water, a hand's breadth from the bottom. The young brood of *wasps, hornets,* and *humble-bees,* are likewise very good. Also *minnows, loaches sharplings,* and *bull-heads. Snails,* black and white ; the black ones bellies slit to shew the white. Likewise *cherries, blackberries, cheese* kept a day or two in wet rags, which makes it tough, or steeped in a little honey. Also *salmon-spawn,* which must be boiled till it is hard enough to stick on the hook ; and if you wish to preserve it, sprinkle a little salt over it, and get a glazed earthen pot, and put a layer of wool at the bottom of it, and then a little salmon spawn upon that ; then wool again, and then spawn, and so proceed alternately till the pot is filled : it is a most destructive bait in the winter and spring, especially if angled with, where salmon are known to spawn ; for there every kind of fish resort in order to devour it.

CHAP. IV.

OF NATURAL FLY FISHING WITH A DESCRIPTION OF FLIES GENERALLY USED, AND A CHOICE COLLECTION OF RULES AND HINTS TO BE OBSERVED IN THE ART OF ANGLING.

NATURAL *fly-fishing,* which comes under the heads, of *Dibbling, Dapeing,* and *Dabbing,* is a method with which the largest fish are taken, and requires a deal of nicety and circumspection. The general rule in this way of angling

is

is to fish with a line about half the length of your rod; but if there is wind stirring, with as much as it will carry out; but you need hardly ever fish with more than the first length, as *dibbling* must be performed as near as possible to the bank that you stand on; therefore a long rod and a short line is the best, which you will command with ease, and be able to shelter yourself from the sight of the fishes, behind bushes, stumps of trees, &c. The line you *dib* with should be very strong: for when you have struck a good fish, you will have a hard bout with him before you kill him, for want of a greater length of line: therefore, whenever I *dib* I always use a ringed rod, with a winch for my line fixed on it, by which means I can always keep my line to any length, without the trouble of changing it; and when I have hooked a good fish, can always give him as much scope as I think necessary, and kill him with great ease and certainty; this method I would by all means advise the angler to use, who will be thoroughly convinced of its utility at the first trial he makes. Let the top of your rod be a stiff one. When you see a fish rise near you, guide your fly over him immediately, and he's your own, if the fly you use is strong on the water. When you dib for *chub*, *roach*, and *dace*, move your fly very slow when you see them make at it, or let the stream carry it down towards them; if it be in a still, deep, shady hole, draw the fly sideways by them, and they will always eagerly pursue it. The roach takes flies the best a little under water. The best for the angler's use in this method of angling, are as follow:

Oak-fly, Ash-fly, or Woodcock-fly,

Found on the body of an oak, or ash, with his head downwards in general, and near the bottom of the tree; it is a brownish fly, and is taken from the beginning of May till the end of August.

Stone-fly,

Found under hollow stones, at the side of rivers; is of a brown colour, with yellow streaks on the back and belly; has large wings, and is in season from April to July.

Green-drake,

Found among stones by river sides, has a yellow body, ribbed with green, is long and slender, with wings like a butterfly, his tail turns on his back, and is easily taken from May to Midsummer; put the point of the hook into the thickest part of his body, under one of his wings, run it directly through, and out on the other side, then take another, and put him on in the same manner, but with his head the contrary way; they will live so near a quarter of an hour.

The *Green* and *Grey-drake*, are taken both in streams and still waters, at all hours of the day, while in season; the *Stone-fly* chiefly in the morning and evening.

Grey-drake,

Found in general where the Green-drake is, and in shape and dimensions perfectly the same, but almost

almost quite another color, being of a paler and more livid yellow; and green and ribbed with black quite down his body; with black shining wings, diaphanous and very tender: it comes in, and is taken after the Green-drake, and when made artificially, as directed in part the 2d, for the month of May, kills fish very well. The following curious account of it from Bowlker, cannot fail to amuse the reader.

"I happened to walk by the river side, at that "season of the year, when the *May-flies* (he "means the grey sort) which are a species of the "*Libella*, come up out of the water, where they "lie in their husks for a considerable time, at the "bottom or sides of the river, near the likeness "of the *Nymph* of the small common *Libella*, but "when it is mature, it splits open its case, and "then, with great agility, up springs the new "little animal, with a slender body, four blackish "veined transparent wings, with four black "spots on the upper wings, and the under wings "much smaller than the upper ones, with three "long hairs in its tail. The husks which are "left behind, float innumerable on the water. "It seemed to me a species of *Ephemeron*; and I "imagined it was the same insect described by "*Godart* and *Swamerdan*, but a few days con-"vinced me to the contrary; for I soon found "them to be of a longer duration than theirs.— "The first business of this creature, after he is "disengaged from the water, is flying about to "find out a proper place to fix on, as trees, bushes, "&c. to wait for another surprising change, "which is effected in a few days. The first hint "I received of this wonderful operation, was "seeing the *Exuviæ* hanging on a hedge: I then

"collected

" collected a great many, and put them into
" boxes, and by strictly observing them, I could
" tell when they were ready to put off their husks,
" though but so lately put on. I had the plea-
" sure to shew my friends one that I held in my
" hand all the while it performed this great work.
" It is surprising to see how easily the back part
" of the fly split open, and produced the new
" birth; which I could not perceive partakes of
" any thing from its parent, but leaves head, body,
" wings, legs, and even its three-haired tail, be-
" hind on the case. After it has reposed itself a
" while, it flies with great briskness to seek its
" mate. In the new fly a remarkable difference
" is seen in their sexes, which I could not so ea-
" sily perceive in their first state, the male and
" female being then much of a size; but now the
" male was much the smallest, and the hairs in
" his tail much the longest. I was very careful
" to see if I could find them engendering, but all
" that I could discover, was, that the males sepa-
" rated, and kept under cover of the trees, remote
" from the river; hither the females resorted, and
" mixed with them in their flight, great numbers
" together, with a very quick motion of darting
" or striking at one another when they met, with
" great vigor, just as house-flies will do in a
" sunny-room: this they continued to do for
" many hours, and this seemed to be their way
" of coition; which must be quick and soon per-
" formed, as they are of so short a duration.
" When the females were impregnated, they left
" the company of the males, and sought the river,
" and kept constantly playing up and down on
" the water. It was very plainly seen, that every
" time they darted down, they ejected a cluster of

" eggs,

" eggs, which seemed a pale, blueish speck, like
" a small drop of milk, as they descended on the
" water; then, by the help of their tail they
" spring up again, and descend again, and thus
" continue till they have exhaused their stock of
" eggs, and spent their strength, being so weak
" that they can rise no more, but fall a prey to
" the fish; but by much the greater number pe-
" rish on the waters, which are covered with
" them: this is the end of the females: but the
" males never resort to the rivers, as I could per-
" ceive, but after they have done their office,
" drop down, languish and die under the trees and
" bushes. I observed that the females were most
" numerous, which was very necessary, consi-
" dering the many enemies they have, during
" the short time of their appearance, for both
" birds and fish are very fond of them, and no
" doubt under the water they are food for small
" aquatic insects. What is further remarkable in
" this surprising creature is, that in a life of a
" few days it eats nothing, seems to have no ap-
" paratus for that purpose, but brings up with it
" out of the water, sufficient support to enable it
" to shed its skin, and to perform the principal
" end of life with great vivacity. The particular
" time when I observed them very numerous and
" sportive, was on the 26th of May, at six o'clock
" in the evening. It was a sight very surprising
" and entertaining, to see the rivers teeming with
" innumerable, pretty, nimble, flying, insects,
" and almost every thing near covered with them.
" When I looked up into the air it was full of
" them, as high as I could discern, and being so
" thick, and always in motion, they made almost
" such an appearance as when one looks up, and
" sees

" sees the snow coming down; and yet this won-
" derful appearance, in three or four days after
" the last of May, totally disappeared."

Hawthorn-fly,

Found on every hawthorn bush when the leaves come forth. It is used for *dibbing*, in some rivers for trouts.

Great Moth,

Found when there is a little breeze in summer evenings, in gardens; has a great head, not unlike an owl, whitish wings, and yellowish body. The chub takes this exceedingly well.

Black-Bee, or Humble-Bee,

Found in clay walls, and is an excellent bait for the chub. Some cut off his legs and upper wings.

N. B. The reader will find the peculiar method of dibbing for chub, under the description of that fish.

Rules and Hints to be observed in Angling.

1st. Every brother angler should be possessed of a great deal of patience and resignation, and not be cast down with bad luck, or be elated with good; for the same success cannot always attend him.

2d. Never angle in glaring colors, for they are the easiest to be discerned by the fishes, always turn out early in the morning; for that is the best time

time of the day; keep your tackle always neat, and let your baits be in the highest perfection.

3d. When you angle, shelter yourself as much as possible from the sight of the fishes, for they are timorous and easily frighted; and when you angle for trout, you never need make above one or two trials for him in the same place, for he will in that time either take the bait or let it alone.

4th. When the nights prove dark, cloudy or windy, you will the next day have but little sport in respect to catching large fishes, especially trouts; for in those nights they range about and devour small fishes; but if the nights are bright, and the moon and stars are out, and the days following should be overcast, dark, and gloomy, you may depend on having good sport; for fishes are then as timorous as in sun-shiny days, and never stir from their holds; therefore, having abstained from food all night, they are hungry and eager, and being encouraged by the darkness and gloominess of the day, to range about, they then bite boldly and eagerly.

5th. If you wish to know what ground bait fishes like best, the first you take open his stomach, and there you will find what he fed on last, and bait accordingly.

6th. If before you go out to angle, you should imagine, by the looks of the weather, that it will prove showery, or thunder, always take three or four night lines out with you, and whilst you angle for other fish, lay them in according to your judgment; baited with well-scoured lob-worms, and you may depend on catching large eels, trout, &c.

7th. The best way to bait your hook, for this kind of fishing, or for *worm-fishing* in general, either

either with *lob-worms, brandlings,* &c. is thus: if you bait with one worm, put your hook into him somewhat above the middle, and out again a little below the middle; having so done, draw your worm above the arming of your hook: but note, you must enter the hook at the tail of the worm, and not at the head; then, having drawn him above the arming of your hook before-mentioned, put the point of your hook again into the very head of the worm, till it come near the place where the point of the hook first came out, and then draw back that part of the worm that was above the shank or arming of the hook: if you fish with two worms, then put the second on before you turn back the hook on the first worm.

8th. If when you are angling in any particular spot, and have had good sport, if the fishes should suddenly leave off biting, you may conclude that some of the fish of prey are come to the part you are fishing in; therefore put a *minnow* on your hook alive, sticking it through his upper lip, or back fin: let your tackle be strong, in case the pike should be there, but for a certainty you may depend that either he or the perch will take it. But the best way is to have a *trimmer* or two with you, which may be applied with great advantage whilst you angle for other fish.

9th. When you have struck a good fish, keep your rod bent, which will prevent him from running to the end of the line, whereby he might break his hold.

10th. In ponds, angle near the fords where cattle go to drink: and in rivers, angle for breams in the deepest and quietest parts: for *eels,* under trees hanging over banks; for *chubs,* in deep shaded holes; for *perches,* in scours; for *roaches,*

in

in winter in the deeps, at all other times where you angle for *perches:* and for trouts in quick streams.

11th. It is good angling in whirlpools, under bridges, at the falls of mills, and in any place where the water is deep and clear, and not disturbed with wind or weather; also, at the opening of sluices, and mill-dams, and if you go with the course of the water, you will hardly miss catching fishes, that swim up the stream to seek what food the water brings down with it.

12th. When you fish for *roach, dace,* &c. in a stream, cast your ground-bait above your hook, and always remember to plumb your ground.

13th. Never trust the strength of your rod or line when you have hooked a good fish, but always use your landing-net.

14th. If the joints of your rod through wet, should stick so that you cannot easily get them asunder, never use force, for then you will strain your rod; but turn the ferrel of the joint that is fast, a few times over the flame of a candle, and it will separate.

15th. The best times for angling are from April to October, and the best time of the day from three till nine in the morning, and three in the evening till sun-set. The south wind is the best to angle in; the next best point to that is the west, the cooler these blow in the hottest months, is the best time to fish.

16th. Never angle in an easterly wind, for your labour will be in vain; but you may if the wind blows from any other point, provided not too sharply. Fishes will never bite before a shower of rain; this hint may save you many a wet skin*.

17th.

* Vide the Prognostics.

17th. In the morning, if there happens to be a hoar frost, either in the spring or advancing of the season, fishes will not bite that day, except in the evening: and after they have spawned, very ill, till with grass and weeds they have scoured themselves, and by that means recovered their appetite.

18th. The best time for the *trout* to be taken, and other fishes with the ground-line, is morning and evening, in clear weather and water; but if the day proves cloudy, or the water muddy, you may angle all day long.

19th. The angler may depend on catching store of fishes, in a dark, close, gloomy, or lowering day, if the wind be southerly, and when, as the poet observes,

> "The stealing show'rs is scarce to patter heard
> "By such as wander thro' the forest walks,
> "Beneath th' umbrageous multitude of leaves."

Having given the reader every necessary instruction, in regard to the *breeding*, and *feeding* of fishes; with the best advice concerning his *rods, lines, floats, hooks, baits, &c.* and a set of very choice rules, hints, and cautions, I shall now tell him the best methods of taking the fishes in general angled for in *England* and *Wales*.

CHAP.

CHAP. V.

A DESCRIPTION OF THE FISH GENERALLY ANGLED FOR IN ENGLAND AND WALES WITH THE PROPER TIMES AND SEASONS TO FISH FOR THEM; THEIR PECULIAR HAUNTS, SPAWNING TIME, AND MOST KILLING BAITS, &c.

THE SALMON.

THE *Salmon*, according to the opinion of some, breeds in the sea; but that of others seems better warranted, that he breeds in the clear, sandy, parts of rivers, not far from the mouths thereof. They commonly spawn in *October*, and the young become *samlets* the following year, and in a few months a large salmon. They spawn in some rivers in September; but in the Severn in May. The *milter* and *spawner* having performed their office, betake to the sea, and we are told that when they have been obstructed in their passage, they have grown so impatient, that clapping their tails to their mouths, with a sudden spring, they have leaped clear over wears and other obstacles which stood in their way; and some by leaping short, have by that means been taken. If they happen to meet with such impediments that they cannot get to sea, they become sick, lean, and pine away, and die in two years. The principal occasion or their dying is this; the salmon being a fish by nature tender, and very chill, cannot, in the winter-season, endure the extreme frigidity of

of the fresh river water, by reason of its tenuity, especially being so lately weakened by spawning; and, therefore, by instinct, they make the sea their winter habitation, the sea being naturally warm. But if they spawn in the mean time, from thence proceeds a small salmon, called a *Skegger*, which never grows large. The female salmon is distinguished from the male, because its nose is longer and more hooked, its scales not so bright, and its body speckled over with dark brown spots; its belly flatter, and its flesh not so red; more dry, and less delicious to the taste.

The principal rivers in *England* for *salmon*, are, 1st. The *Thames*, whose *salmon* beats all others for taste and flavour; the *Severn* and the *Trent*; the *Lon* at *Lancaster*, about *Cockersand Abbey*; at *Workington* in *Cumberland*; *Bywell*, in *Northumberland*; *Durham*, and *Newcastle on Tyne*; the *Dee* in *Cheshire*; and the rivers *Usk* and *Wye* in *Monmouthshire*. Besides the *salmon-leap* in the river *Tivy* in *Pembrokeshire* there is another in the river *Ban* in *Ireland*: this river is in the mountains of *Mourn* in the county of *Down*, and it passes through *Lough Eaugh*, or *Lough Sidney*, a large lake in the county of *Colraine*. Mr. *Cambden* says it breeds *salmons* in abundance, above all other rivers in *Europe*, because it is thought to exceed all others for clearness, in which sort of water *salmons* delight. He bites best about three in the afternoon, in *May*, *June*, *July*, and *August*, if the water be clear, and a little breeze of wind stirring: especially if the wind and stream are contrary. You must fish for him like a trout, with a worm, fly, or *minnow*, or *lob-worm* is an excellent bait for him, well scoured in moss, which makes it tough, clear, and lively. When you have struck him, he will plunge and bounce

bounce in the water very much, therefore it is necessary to have a strong rod, ringed the same as a *trowling-rod*, and a winch, with a strong line on it forty yards long, with which length, and a proper playing him, you may kill the largest sized one. He has not a constant residence like a trout, but removes often, and you should always angle for him as near the spring-head as possible, in the deepest and broadest parts of the river, *near the ground*. Put two large *lob-worms* on at a time, and you may fish without a float, that is, with a running line. Let one yard next to your hook be *gimp*, and your hook a proper sized *salmon-hook*. No. I.

N. B. When I come to treat of *fly-fishing*, the proper flies for the salmon, &c. will be clearly expressed.

The Trout.

The *Trout* is a delicious fresh-water fish, speckled with red and yellow; coming in and going out of season with the buck, and spawning in the cold months of *October* and *November*, whereas all other fishes spawn in the hot summer months. There are several species of this fish, all valued very much: but the best are the red and yellow; and of these the female distinguished by a less head and deeper body, is preferred; by the largeness of their backs you may know when they are in season, which may serve as a rule for all other fishes. All winter long they are sick, lean, and unwholesome, and frequently lousy. As the spring advances, deserting the still deep waters, they repair to the gravelly ground, again which they

they continue to rub, till they have got rid of their lice, which are a kind of worm, with large heads; from that time they delight to be in sharp streams, and such as are very swift; where they lie in wait for *minnows, May-flies,* &c. The latter part of May they are in the highest perfection. He is usually caught with a *worm, minnow,* or *fly,* either natural, or artificial; the different baits for him are the *earth-worm, dung-worm,* and the *maggot,* or *gentle,* but the best are the *lob-worm* and *brandling.* His *haunts* are, *purling brooks* running very swift over chalk stones, gravel, &c. he is oftener taken in the side of the stream, than in it, though the large ones are often caught in the deepest part of it. He delights to shelter himself behind large stones, or small banks, that hang over the river, which the stream running against, creates a foam; also in the eddies between two streams; his hold is usually under the roots of trees, and in hollow banks in the deepest parts of rivers. When you angle for him at the ground, let the link of your line, next the hook, be the best *silk worm gut* you can provide; and have a nice elastic rod, which will enable you to strike true, and to feel him when he bites. Angle for him with a running line, and begin at the upper part of the stream, carrying your line with an upright hand, and feeling your lead run on the ground about ten inches from the hook, leading your line according to the swiftness of the stream; as before directed. If you bait either with one, or two worms, follow the manner of baiting them which I have laid down in the rules, and you will run on the ground without being entangled.

There is a very killing method likewise for a large trout; make a pair of wings of the feather of

of a land-rail, and point your hook with one or more cadis's; your hook should be bristled, that is, when you whip on your hook, fasten a hog's bristle under the silk, with the end standing out about a straw's breadth at the head of the hook, from under the silk, and pointing towards the line, by which means the head of the cadis will be kept close to the wings: angle with a rod about five yards long, and a line about three; cast the wings and cadis up the stream, which will drive it down under the water towards the lower part of the hole; then draw it up the stream very gently, though irregularly, at the same time shaking your rod, and in a few casts you will be sure to hook him, if there is one in the hole You may angle the same way with two brandlings. If you use two cadis's with the wings, run your hook in at the head and out at the neck of the first, and quite through the other from head to tail.

The *minnow* is the most excellent of all baits for the trout; when you fish with one, chuse the whitest, and middle-sized ones, these being the best; and you must place him on your hook in such a manner, that being drawn against the stream he may turn round. The best way of baiting with a minnow is thus: put your hook in at his mouth, and out at his gill, drawing it through about three inches: then put the hook again into his mouth, and let the point and beard come out at his tail; then tie the hook and his tail about with a fine white thread, and let the body of the minnow be almost strait on the hook; then try if it turns well, which it cannot do too fast. Angle with the point of your rod down the stream, drawing the minnow up the stream by little and little, near the top of the water. When

the trout sees the bait, he will come most fiercely at it, but be careful not to snatch it away, which at first you may be apt to do; and never strike till he has turned with the bait.

N. B. In this way of angling, a ringed rod is to be always used, with a winch for your line, which should have two or three swivels on it; by which means the minnow will spin the better.

The rivers most famous for trout are, the *Kennet* near *Hungerford*, in *Berkshire*; the *Stower*, in *Kent*, which runs through *Canterbury*, and is said to breed the best trouts in the south-east of *England*; those in the *Wandle*, near *Cashalton*, in *Surry*; the *Amerly*, in *Sussex*; the *Dove*, *Wye*, *Lathkin*, and *Bradford*, in *Derbyshire*; *Ribble* and *Irk*, in *Lancashire*; and in the *Usk* and *Wye*, in *Monmouthshire*, are accounted excellent trouts; but to speak impartially, no one can absolutely determine in what particular river or brook are the most and best trouts. This, however, is certain, that trouts are better, or worse, bigger or less, according to the nature of the soil on which the river runs: pure clear, transparent streams, running on rocks, pebbles, or more especially *lime-stones* or *flints*, are experimentally found to breed, and afford the most delicate and best trouts.

The hook No. 2 or 3.

*The Gragling, Grayling, or Umber.**

This fish has three different names given it, according to the different parts of England where it is found; he is by no means a general fish, and what anglers seldom meet with, except in the rivers *Dove* and *Trent*, and some other small streams, particularly in that which runs by Salis-

* He is called Umber from his quickness of evading the sight.

bury.

bury. The *haunts* of the grayling are nearly the same of the trout; and in fishing for either of them, you may catch both. They spawn the beginning of *April*, when they lie mostly in sharp streams; in December he is in his prime, at which time his gills and head are blackish, and his belly dark grey, studded with black spots. He bites very freely, but is often lost when struck, his mouth being very tender. Angle for him about mid-water, he being much more apt to rise than descend; and when you angle for him alone, and not for the trout also, use a quill float, with the bait about six or seven inches from the ground. He takes *brandlings*, *gilt-tails*, *meadow worms*, *gentles*, &c. but the most excellent bait for him in March or April is the *tag-tail*.

The hook No. 10.

The Carp.

The *carp* is allowed to be the *queen* of fresh water fishes (as the salmon is the *king*), and lives longer than any other fish (except the eel) out of its element. They breed several times in one year; but their first spawning time is in *May*. Mr. Ray assures us, that in Holland they have a speedy way of fattening them, by hanging them up in a net in a cellar, and feeding them with bread and milk. Patience is highly necessary for every one to be endowed with who angles for carps, on account of their sagacity and cunning; their *haunts* are in the deepest parts of ponds and rivers, and in the latter where the streams run slow. When the weather in April, May, June, July, and August, is hot and fine, you cannot be too early or late at the sport. He seldom refuses

the *red-worm* in April, the *cadis* in May, or the *grasshopper* in June, July, and August. You must angle for him with a strong rod and line, a quill float, and strong *gut* at bottom; the *hook* in the medium of size; being a *leather-mouthed* fish, he seldom breaks his hold, if your tackle is strong and you play him properly. But whenever you intend to fish for him particularly, and in good earnest, over night lay in a ground-bait of garbage; as chickens guts, blood mixed with cowdung, or any coarse paste; also ale grains and blood incorporated with clay, and at the same time that you throw any of the ground-baits in, plumb the ground to two depths, (for it is best to angle for carps with two rods,) one about mid-water, the other four or five inches from the ground. The next morning lay your lines in very cautiously and success will attend you. *Gentles* are very good baits for the carp, also a paste made of *honey* and *bread*, and one made with bread and water alone, tinctured with red lead, but nothing, in my opinion, beats a *green pea*, parboiled, having killed more with that than any other bait.

A carp weighing fifteen pounds seven ounces, was some time back taken out of the water in Lord *Exeter's* grounds at *Burghley*.

In the *Swiss* and *Italian lakes*, it is far from rare, to catch trouts that are double that size. The hooks for this fish No. 3 or 4.

In fine sun-shiny days, carps will often *prime* about noon, and swim about the edges of a pond, to catch such flies as fall upon the surface of the water: let the angler then take a strong rod, and pliable at the top, a strong line, and a hook large enough for a *lob-worm*; then finding a place free from

from weeds, about the compass of the crown of a hat, let him drop his bait without a float, and with only one large shot upon the line, which he must lodge upon the leaf of some adjoining weed, so that the bait may not be above eight inches in the water; then retiring, but so as to keep his eye upon the shot, let him wait till he sees it taken away, with about a foot of the line, and then strike: when he has hooked his fish, let him keep him tight, and not suffer him to entangle himself among the weeds: but either draw him out by main force, or pull him into a clear place.

N. B. The foregoing method is an excellent one, and great numbers of carp may be taken by it in ponds which are well stocked.

The Bream.

The time of the *bream's* spawning is in *June*; his chief residence is in ponds; he is a bony fish, and very slow of growth. From *Saint James's tide* to *Bartholomew tide* is the best time to angle for him, and the best time of the day in that season is, from sun rise, to eight o'clock, in a gentle stream, the water being rather thick, and curled with a good breeze. He delights in the deepest and widest parts of the water, and if the bottom is clear and sandy it is the better. His baits are *gentles*, *red-worms*, *gilt-tails*, and *grasshoppers*: when he takes your bait he makes for the opposite shore, therefore give him play, for though he is a strong-made fish, he will not struggle much, but two or three times fall on one side, and you may land him very easily. Angle for him with a strong line, with *gut* at bottom, the hook

No. 4. and throw in the place you intend to angle for him, a ground-bait made of malt, grains, bran, blood, and clay, the night before; and you may fish with two or three lines, plumbed to different depths, and follow the method which is laid down for the carp.

The French esteem this fish highly, and have this proverb concerning him; *that he who has breams in his pond, is able to bid his friend welcome.* The best part of a bream is his belly and head.

The Pike.

The *pike* is a very long-lived fish, according to Lord *Bacon* and *Gesner;* who say he out-lives all others. He is called the *tyrant of the waters,* and will almost seize upon any thing, nay unnaturally, devour his own kind. He spawns in *February* or *March;* the best pike are those that are found in rivers, those in ponds are not near so good: the larger he is, the coarser the food, and so *vice versâ.* He feeds on small fishes and frogs, and on a weed called pickerel, from which some assert he derives his being; he is a solitary, melancholy, and bold fish, always being by himself, and never swimming in shoals, or in company with other fishes. There are two ways of angling for the pike, by the *ledger bait* and the *walking bait.* First, the *ledger bait* is that fixed in one certain place, and which the angler may leave, and angle for other fish; of this kind the best is some living bait, as a dace, gudgeon, roach, or live frog. To apply it, if a fish, stick the hook through his upper lip, or back fin, then fastening it to a strong line, ten or twelve yards long, tie the other end to some stake in the ground, or stump of a tree, near the pike's haunt;

haunt; letting the line pass over the fork of a stick, placed for the purpose, and suspending the hook, by a yard of the line in the water; but so as when the pike bites the fork may give way, and let him have line enough to go to his hold, and pouch the bait. If you bait with a frog, put the arming wire in at his mouth, and out at his gill; then tie the frog's leg above the upper joint to the armed wire. Secondly, The *walking bait* is that which the fisher attends to himself, and is called trowling, from the *French* of *troller*, to move or walk about. Before I proceed any further in this mode of angling for the pike, I shall give the angler a description of that *kind of rod*, line, and hooks, necessary to be used. Your rod must be a strong one, and ringed for the line to pass through, and about three yards and a half long; your line, about thirty yards long, wound upon a winch, to be placed on the butt end of your rod, and with which you may always keep your line to any length; at at the end of your line next the hook let there be a swivel. The hooks that are most general are the two following ones; they are formed and baited in this manner. The first is no more than two single hooks (though you may buy them made of one piece of wire) tied back to back, with a strong piece of gimp between the shanks; in whipping the gimp and hooks together, make a small loop, and take into it two links of chain, about an eighth of an inch diameter; and in the lower link (by means of a staple of wire) fasten by the greater end a bit of lead, of a conical figure, and angular at the point. The second hook may be either single or double, with a long shank, and leaded two inches up the wire with a piece of lead about a quarter of an inch square; at the greater

or lower end fix to the shank an armed wire about four inches long, and at the top of the wire, about half a yard of gimp, with a loop at the top of that; to bait this hook you must have a brass needle about seven inches long; put the loop of the gimp on the eye, or small curve of the needle, then thrust it into the mouth of the fish, and bring it out at his tail, drawing the gimp and wire along with it, till the lead is fixed in the belly of the bait-fish, and the hook or hooks are come to his mouth; then turn the points of the hooks towards his eyes, if a double hook, but if a single one, directly in a line with his belly, and tie his tail to the arming-wire very neatly, with white thread: I always, whether the hook be double or single, put a small piece of a worm on the point or points of it; which prevents their pricking the pike, for if it does he will instantly leave it. To bait the former, put the lead into the mouth of the bait-fish, and sew it up, the fish will live some time; and though the weight of the lead will keep his head downwards, he will swim with nearly the same ease as if at liberty. Either of the former hooks being baited and fastened to the swivel, cast it into the water, and keep it in constant motion; sometimes letting it sink, and at others raising it gradually, chiefly throwing it into the parts of the pond, meer, or river, where his haunts are most usual; as near banks, under stumps of trees, by the side of bullrushes, water-docks, weeds, or bushes; but in any of these places you need never make above a trial or two for him, for if he is there he will instantly seize the bait. When you draw your bait near the bank, play it longer there, first deep, then raise it higher and higher by degrees, till you bring it so near the top

that

that you can see it glitter; take it not hastily out, because he often takes it near the top. When he has taken it give him line, and let him run to his hold and pouch it; allow him in general five minutes law, then strike him, and divert yourself with him as you please. But, if after he has run on with the bait to his hold, and rests there but about a minute, and then runs quickly off with it again, do not strike him until he has rested a second time; and not then until the five minutes are expired, unless he runs off again before they are; which if he does, draw a tight line and strike him immediately; if he resists very much give him line enough, which will soon exhaust his strength; and when you pull him towards you do not do it violently; for if you do he will launch and plunge in such a manner, that though he may not be able to break your tackle, yet he will tear away his hold; nay, even his entrails if he is hooked there; but if you feel him come easily towards you, wind up your line, until you see him; then if he struggles again very much, give him line again, and so proceed till you have killed him; by following which methods you will soon accomplish. The pike bites best from the middle of summer to the end of autumn, about three in the afternoon, in clear water, ruffled with a gentle gale; but in winter all day long; and in the spring he bites early in the morning, and late in the evening. The best baits for him are small *roaches, daces, bleaks,* &c. if the day be dark and cloudy; but a *gudgeon* is the best, if the water is clear, and the day bright and fine. Your live baits should be kept in a tin kettle, with holes made in the lid, that you may change your water often, which will keep them alive a long while;

your dead ones in a tin box made for that purpose with bran, which dries up the moisture that hangs about them, and contributes to preserve them longer. Angling for the pike at the *snap* is to let him run a little, and then to strike him the contrary way from whence he runs, with two strong jerks; in this method you must use a double spring hook, which is to be had at any of the shops, and your tackle must be very strong. The *snap* is best used in March, when they are spawning; at which time they are sick and lose their stomach; though they will then take your bait, but immediately throw it out of their mouths; therefore striking them when they first take the bait is the only way to be even with them; which is called *angling at snap*. The way to bait the *snap hook* is thus: make a hole with a sharp penknife in the side of the bait fish; then put the gimp that is fastened to your hook into it, and draw it out at the mouth, till the spring hook comes to the place where the incision was made; which when it is, put it into the belly of the fish, then have a piece of lead, about the size of a horse-bean, though of an oval form, with a hole through it from end to end large enough for the gimp to go through; draw it down to the fish's mouth, then put it in it, and sew it up. Or you may make an incision in the skin only, and draw the gimp out at the bone behind the gills, then enter it again under the gills, and bring it out at the mouth, which I think is the best method, because the hook has only the skin to hinder its fixing in the pike; whereas in the first method it must pierce through the flesh and skin before it can touch him; and if it is not very large, may hook him so slightly as to spoil all your sport.

There

There used to be a way also of taking pike called *huxing*; but as the use of *trimmers* is now so generally known, it would be needless for me to insist further upon it.

I shall now communicate to the reader a method which I have taken more pikes and jacks with than any other way. The hook which you must use, is to be like the first hook that I have mentioned, with this exception only, that the lead of a conical figure must be taken away: then, before you fix the swivel on the bottom of the line, put on a cork float that will swim a gudgeon, then put on your swivel, and fix your hook and gimp to it: put a swan shot on your gimp, to make your float cock a little, and of such a weight, that when the hook is baited with the gudgeon, it may do so properly. Your gudgeons must be kept alive in a tin kettle. take one, and stick the hook either through his upper lip or back fin, and throw him into the likely haunts before mentioned, swimming at mid-water. When the pike takes it, let him run a little, as at the *snap*, and then strike him. In this method of pike fishing, you may take three kinds of fish viz. pikes, perches, and chubs.

Rules to be observed in trowling. *September* and *October* are the best months for *trowling*, because the weeds are then rotten, and the fishes are fat with the summer's feed. March is the best for the *snap*, because, as I have said before, they then spawn, and are sick, and therefore never bite freely.

A large bait intices the pike to take it the most, but a small one takes him with greater certainty.

Always, both at *trowl* and *snap*, cut away one of the fins, close at the fins of the bait fish, and another at the vent on the contrary side, which makes it play better.

Let no weeds hang on your bait, for if they do, the pike will not touch it: and always throw it into the water gently.

When you have a bite, and the fish goes down the stream, it is commonly a small one: but on the contrary, if he sails slowly upward with the bait, it is a sign of a good one: great fishes in general bite more calmly than small ones; for the small ones snatch and run away with the bait without any deliberation; but old fishes are more wary.

Be careful how you take a pike out of the water, for his bite is venemous; therefore if you have not a landing net, put your finger and thumb into his eyes, and take him out that way.

Both at *trowl* and *snap*, always have one or more swivels on the line, which will prevent its kenking, and make it play better in the water.

Whenever you find your *bait-fish* water sopt, change it directly: the hooks for this fish are various.

The Perch.

The *perch* is bow-backed like a hog, and armed with stiff gristles, and his sides with dry thick scales. He is a very bold biter, which appears by his daring to venture upon one of his own kind with more courage than even the ravenous luce. He seldom grows above two feet long, spawns once a-year, either in *February* or *March*, and bites best in the latter part of the spring. His *haunts* are chiefly in the streams not very deep, under hollow banks, a gravelly bottom, and at the turning of an eddy. If the weather is cool and cloudy, and the water a little ruffled, he will bite all day long, especially from eight till ten in the morning, and from

from three till six in the evening. If there are thirty or forty of them in a hole, they may be all caught of one standing; they are not like the solitary *pike*, but love to accompany one another, and swim in shoals, as all fishes which have scales are observed to do. His baits are *minnows*, little *frogs*, or *brandlings*, if well scoured; when he bites give him time enough, and you can hardly give him too much; for as he is not a leather-mouthed fish, without you do, he will often break his hold. Angle for him, if you bait with a brandling, with an indifferent strong line, and *gut* at bottom, your hook No. 4, 5, or 6, and about five or six inches from the ground. But if you rove for him with a *minnow* or *frog* (which is a very pleasant way) then your line should be strong, and the hook armed with gimp, and the bait swimming at mid-water, suspended by a cork-float. I for my own part always use my trowl, that in case a pike should take it, I may be prepared for him. Keep your *minnows* in a tin kettle, and when you bait with one, stick the hook through his upper lip or back fin. If you use the *frog*, stick it through the skin of his hind leg. These directions being carefully attended to, I dare insure the angler success.

The *perch* is much esteemed in Italy, especially when small: *Gesnei* prefers the *perch* and *pike* before the trout, or any fresh fish. The *Germans* say proverbially, *More wholesome than a perch of the Rhine!*

The Tench.

The *tench* (the fishes physician) so called because its slime is said to be very healing to wounded fishes; and what is more strange, the voracious pike is so sensible of his sovereign virtue, that he will

will not hurt a tench, although he will seize any other fish of his own size that comes in his way; and when he or any other fishes are sick, they find relief by rubbing themselves against his body. He is a delicious fresh-water fish; has small scales, yet very large and smooth fins, a red circle about the eyes, and a little barb hanging at each corner of his mouth. His *haunts* are chiefly in ponds amongst weeds; he thrives very ill in clear waters, and covets to feed in foul ones; yet his flesh is nourishing and pleasant. They spawn the beginning of July: the proper time to angle for them is early and late in the months of May, June, the latter end of July and in August. You must use a strong line with *gut* at bottom. The hook, No. 2 or 3, and a quill float; the depth about two feet. He bites best at *red-worms*, if you dip them first in tar; at all sorts of pastes made up with strong scented oils, and at one made with the inside of a roll, and honey. Also at *cad-worms*, *lob-worms*, *flag-worms*, *gentles*, *marsh-worms*, and soft boiled *bread grain*. Besides the river *Stour* in *Dorsetshire*, so particularly recommended for plenty of *tench* and *eels*; there is *Brecknock Mere*, in *Brecknockshire*, being two miles in length, and as much in breadth, full of *perches*, *tenches*, and *eels*.

N.B. *One river tench is worth ten pond.*

The Flounder.

The *flounder* may be fished for all day, either in swift streams, or in the still deep, but best in the stream, in the months of April, May, June, and July. Your line must be a single-haired one, with a small float, and the hook, No. 6 or 7. Let your bait

bait touch the ground, which may be any sort of small *worms, wasps,* or *gentles.* He being a fish but seldom taken with the rod and line, to enlarge on the subject would be totally unnecessary.

The Chub *.

The *chub* is a fish by no means in very much esteem, his flesh being very coarse, and full of small bones; yet he affords good sport to the angler, especially to a *Tyro* in that art. They spawn about the beginning of *April*; and their *haunts* are chiefly in large rivers, having clayey or sandy bottoms, in holes shaded with trees; where many of them in general keep together. He bites best from sun-rising till eight, and from three till sun-set. In March and April you must angle for the chub with *worms,* in June and July, with *flies, snails,* and *cherries*; but in August and September use a paste made of *Parmesan* or *Holland cheese,* pounded in a mortar, with a little butter, and a small quantity of saffron put to it to make it of a yellow colour. In the winter, when the chub is in his prime, a paste made of *Cheshire cheese* and *turpentine,* is very good; but no bait more killing for him than the *pith* of an ox or cow's back-bone; you must take the tough outward skin off very carefully, but take particular care that you do not bruise the inward skin; also the brains of the above animals are excellent for him. Let your line be very strong, with a quill float on it, strong *gut* at bottom; the hook, No, 3 or 4, the depth, in hot weather, mid-water, in cold-ish near the bottom, and in quite cold weather on the ground. The most pleasant way of taking him is by dibbing, which is thus performed: in a hot summer's day go to any hole that you know they

* Pin lines are used for this fish.

haunt,

haunt, and you will find perhaps thirty or forty of them basking themselves on the surface of the water: then take your rod, which must be very strong and long, your line the same, but about a yard in length: and bait the hook with a *grasshopper*; you must shelter yourself behind some bush or stump of a tree, so as not to be seen; for the chub is very timorous, and the least shadow will make him sink to the bottom, though he will soon rise again. Having therefore fixed your eye upon the largest and best, drop your bait with great caution before him, and he will instantly take it, and be held fast; for he is a leather-mouthed fish, and seldom breaks hold, if played properly.

N.B. In dibbing, where you cannot get a *grasshopper*, any *fly*, *beetle*, or *moth*, will equally answer the purpose.

When you are roving for perch with a minnow you will often take large chub.

The Barbel.

The *barbel*, so called on account of the barb, or beard that are under his nose or chops, is a leather-mouthed fish; and though he seldom breaks his hold when hooked, yet if he proves a large one he often breaks both rod and line. The male is esteemed much better than the female, but neither of them are very extraordinary. They swim in great shoals, and are at the worst in *April*, at which time they spawn, but soon come into season again; the places they chiefly resort are such as are weedy, gravelly rising grounds, in which this fish is said to dig, and rout his nose like a swine. In the summer he frequents the strongest and swiftest currents of

of water, as under deep bridges, wears, &c. and is apt to settle himself amongst the piles, hollow places, and in moss and weeds. In the autumn he retires into the deeps, where he remains all the winter and beginning of the spring. The best baits for him are *salmon-spawn, lob-worms gentles,* bits of *cheese* wrapt up in a wet linen rag to make it tough, or steemped in honey for twenty-four hours, and *greaves*; observe that the sweeter and cleaner your baits are kept the more eager he takes them. You cannot bait the ground for him too much, when you angle for him with any kind of garbage: as *lob-worms* cut in pieces, *malt* and *grains* incorporated with *blood* and *clay*, &c. The earlier and later you fish for him in the months of June, July and August the better. Your rod and line must be very strong: the former ringed, and the latter must have gimp at the bottom, but I think twisted gut is better: a running plummet must be placed on your line, which is a bullet * with a hole through it: place a large shot a foot above the hook, to prevent the bullet falling on it. The worm will of course be at the bottom, for no float is to be used, and when the barbel takes the bait, the bullet will lie on the ground and not choak him. By the bending of your rods you will know when he bites, and also with your hand will feel him give a strong snatch; then strike him, and he will be your own, if you play him well; but if you do not manage him with dexterity, he will break your tackle. You must have on your rod a winch, and a line on it about thirty yards long.

The most famous places near London for barbel-angling are Kingston-bridge and Shepperton-

* I have found lately that the flat plummet is much better.

deeps;

deeps; but Walton-deeps, Chertsey-bridge, Hampton-ferry, and the holes under Cooper's-hill are in no wise inferior. You may likewise meet with them at all the locks between Maidenhead and Oxford.

N.B. Their spawn acts as a violent cathartic and emetic. His liver is likewise unwholesome. The hooks for this fish No. 1 or 2.

The Eel.

Authors of natural history, in regard to the eel, have advanced various conjectures; and in some measure have contradicted each other entirely on this head, namely; whether they are produced by generation or corruption, as worms are, or by certain glutinous drops of dew, which falling in May and June, on the banks of some ponds or rivers, are by the heat of the sun turned into eels. Abr. Mylius, in a treatise on the *origin of animals*, describes a method of producing them by art. He says, that if he cut up two turfs covered with May-dew, and lay one on the other, the grassy side inwards, and thus expose them to the heat of the sun, in a few hours there will spring from them an infinite quantity of eels. Eels are distinguished into four kinds, viz. the *silver eel*; a greenish *eel*, called a *grey*; a blackish *eel*, with a broad flat head; and lastly, an *eel* with reddish fins. The eel's *haunts* are chiefly amongst weeds, under roots and stumps of trees, holes, and clefts in the earth, both in the banks and at bottom, and in the plain mud; where they lie with only their heads out, watching for prey; also about flood-gates, wears, bridges, and old mills, and in the still waters that are foul and muddy; but the smallest eels are to be met with in

all

all sorts of rivers and soils. They conceal themselves in the winter for six months in the mud, and they seldom rove about in the summer in the day-time, but all night long; at which time you may take a great number of them, by laying in night-lines, fastened here and there to banks, stumps of trees, &c. of a proper length for the depth of the water, leaded so as to lie on the ground, and a proper eel-hook whipped on each, baited with the following baits, which he delights in, viz. *garden-worms*, or *lobs, minnows, hen's-guts, fish garbage, loaches*, small *gudgeons*, or *miller's thumbs*, also small *roaches*, the hook being laid in their mouths. There are two ways to take them in the day-time, called sniggling and bobbing. *Sniggling* is thus performed: take a strong line, and bait your hook with a large *lob-worm*, and go to such places above-mentioned where eels hide themselves in the day-time; put the bait gently into the hole, by the help of a cleft stick, and if the eel is there he will certainly bite; let him tire himself by tugging, before you offer to pull him out, or else he will break your line. The other method is called *bobbing*. In order to perform this, you must scour some large *lobs*, and with a needle run a twisted silk, or worsted, through as many of them, from end to end, as will lightly wrap a dozen times round your hand; make them into links, and fasten them to strong packthread or whip-cord, two yards long, then make a knot in the line about six or eight inches from the worms; afterwards put three quarters of a pound of lead, made in a pyramidal form on the cord; the lead must be made hollow three parts of the way up it, and then a hole must be bored through it, big enough to put the cord through and let the lead slide down to the knot. Then fix all to a manageable pole,

pole, and use it in muddy water. When the fishes tug, let them have time to fasten, then draw them gently up, and hoist them quick to shore. A boat called a *punt* is very useful in this kind of fishing. Some use an *eel spear* to catch eels with, which is an instrument with three or four forks or jagged teeth, which they strike at random into the mud.

The rivers *Stower* in *Dorsetshire*; *Ankam* in *Lincolnshire;* and *Irk* in *Lancashire;* are famed by their respective neighbours for very excellent *eels* Mr. *Pope* has celebrated the river *Kennet,* in *Berkshire* on the same account, in his Windsor Forest.

The Kennet swift, for silver eels renown'd.

In *Rumsey-mere,* in *Huntingdonshire,* are a great quantity of *eels* and large *pikes,* which they call *Hagets;* but *Cambridgeshire* boasts of having the most and best *eels,* if you credit the natives.

Eel-pouts, another fish somewhat resembling the *eel,* but more esteeemed, are also found in some rivers. Their haunts are the same as the *eel's,* and they are to be taken in peals of thunder and heavy rain, when they leave their holes. The best bait is a small gudgeon. Hooks, the double or single ones.

The Roach.

The *roach* is as foolish as the carp is crafty; he is by no means a delicate fish; the river ones are much better than those bred in ponds. They spawn in *May,* and will bite all day long, if the weather is not in either of the extremes, on the top of the water. Their *haunts* are chiefly in sandy or gravelly deep waters: delighting to be in the shade. In April their baits are *cads* and *worms.* In summer,

mer white *snails* or *flies*. In Autumn, a paste made of fine white bread, moulded in your hands with water, and a little cotton added to it, to keep it from washing off the hook. In winter *gentles* are the best bait for him: you should fish with a line made of single hairs, a quill float, and the lead about a foot from the hook; and when you angle for roach, always cast in a ground bait, made of bran, clay, and bread, incorporated together;* and when you angle with tender baits, always strike at the least nibble that is apparent. *Sprouted malt*, the young *brood* of *wasps*, *bees* dipt in *blood*, and the dried *blood* of *sheep*, are nostrums in this kind of angling.

The largest roach in this kingdom are taken in the Thames, where many have been caught of two pounds and a half weight; but roach of any size are hard to be taken without a boat.

The people who live in the fishing towns along the banks of the Thames, have a method of dressing large roach and dace, which it is said, renders them a very pleasant and savoury food; it is as follows: without scaling the fish, lay him on a gridiron, over a slow fire, and strew a little flour on him; when he begins to grow brown, make a slit, not more than skin deep, in his back, from head to tail, and lay him on again; when he is broiled enough, the skin, scales and all, will peel off and leave the flesh, which will be by that time very firm, and perfectly clean; open the belly, take out the inside, and use anchovy and butter for sauce.

Red-paste is an excellent bait coloured with vermillion or red-lead, as I have before laid down, but it is best to take with you *gentles*, *white-paste*, and

* Coarse bran and flour make an excellent ground bait, but they must not be too much moulded.

their

their other baits, as they are very fond of change, and will refuse one minute what they will take the next. Their hooks No. 11 or 12.

The Dace, or Dare.

This fish, and the roach, are much of the same kind, therefore the directions given for one will serve for the other. They spawn about the middle of March, and will take any fly, especially the Stonecadew-fly, May-fly, the latter end of April and most part of May; and the ant-fly in June, July, and August. When you angle for the dace with the ant-fly under water, let it be about two hand's breadth from the ground. They never refuse a fly in a warm day on the top of the water. The best bait for them in the winter, is the earth bob, it is the spawn of the beetle, and is to be found by following the plough in sandy-ish grounds; put them into a vessel with some of the earth from whence they are taken, and use them all the winter as an excellent bait, as I have before-mentioned in the description of baits. As for your line, &c. the directions given for the roach, will serve in all respects for the dace or dare.

Dace may be also taken with flesh-flies, upon the surface of the water; into whose backs, between the wings, you must put your hook, which should be very small: they bite in the morning and evening; you must then provide a cane-rod, which is the lightest of any, and let it be seventeen feet, at least in length, and your line which should, from the middle downwards, consist of single-hairs, be a little longer than your rod; then provide a sufficient quantity of small house-flies, which keep in a phial, stopped with a cork. With these repair,

especially

especially about seven or eight o'clock in a summer's evening, to a mill-stream, and having fixed three or four hooks, with single hair-links, not above four inches long to your line, bait them with the flies, and angle upon the surface of the water on the smoothest part, at the end of the stream; the dace will rise freely, especially if the sun does not shine on that part of the water where you cast the flies, and you may take two or three at a time. This sport will continue as long as day-light will permit you to see the flies. In the same manner dace will also rise at the ant-fly upon the surface of the water, if used in a morning at the foot of a current or mill-stream, or on the scour before the sun comes on the water. If the water is high, so as to be almost equal with its banks, take your fly-rod, and fasten to your line an artificial-fly, called the caterpillar-fly, or a small red palmer, then take a large yellow gentle, the yellower the better, run the hook through the skin of it, and draw it up to the tail of the fly: this being done, whip it on the surface of the water, and if you are diligent and expert, you will have good diversion. If you angle where two mill-streams are going at the same time, let it be in the eddy between the two streams: first make use of your plummet; if the water is deep, angle within a foot of the bottom, and perhaps you will find but poor sport; but if it proves to be shallow, that is, about the depth of two feet, or not exceeding three, your sport may be better; bait your hook with three large gentles, use a cork floas, be very attentive, and strike at the very first bite: if there are any large dace in the mill-pool, they will resort to the eddy between the two streams.

N. B. Whenever you fish for roach or dace, a ground, without you use a ground-bait, the at[t] temp-

tempt is almost useless; but after great heats, when the weather gets cool, you will be sure to have good sport.—The hooks, No. 11 or 12.

The Gudgeon.

The *gudgeon* is a fish that affords the young angler an amazing deal of diversion; being one that bites very free, and when struck is never lost, because he is a *leather-mouthed* fish. They spawn three or four times in the summer, and their feeding is like the barbel's, in the streams and on gravel, slighting all manner of flies. Their baits are chiefly *wasps*, *gentles*, and *cads*, but the small *red worm* is best. When you angle for them, be provided with a gudgeon-rake, with which rake the ground every ten minutes, which gathers them together. A single haired line is best, with a quill, or cork float, according to the rapidity of the stream; your hook, No. 8 or 9, and your bait on the ground. You may angle for him with a running line by hand without a float.

The author "On *Angling in the River Trent*," gives us a new method of catching them: he first desires us "*never to continue in the water long, "though he has been in it for six hours together;*" he then observes, with his usual circumspection, "*that the best way of catching them, is by going "into the water, and stirring up the sand and gravel.*" This surely may be properly termed *gudgeon hunting* more than *gudgeon fishing*: *Perhaps they are of a different species in the Trent than in the Thames, &c. &c.!!*

The Pope, or Ruff.

This fish, with a double name, is small, and rarely grows bigger than a gudgeon; in shape very

very like the perch, but is better food, being in the taste as pleasant as any fish whatever. His *haunts* are in the deepest running parts of a gravelly river, the exact bottom whereof, having found by plumbing, bait your hooks with small *red-worms*, or *brandlings;* for you may angle with two or three, and have excellent sport. He bites very greedily; and as they swim in shoals, you may catch twenty or thirty at one standing, in a cool, gloomy day. Use the same tackle as for the gudgeon. The River *Yare* in *Norfolk*, is peculiar for plenty of ruffs. Hook, No. 9.

The Bleak, or Bley.

The *bleak*, on account of its eagerness to catch flies, is called by some the *river swallow*, and by others the *fresh-water sprat*, because of its resemblance to the ***sea sprat.*** **He** bites very eagerly at all sorts of ***worms***, *flies*, *pastes*, and *sheep's blood.* You may fish for him with six or seven small hooks at a time. **He** is an excellent fish to initiate a young angler in *fly-fishing*, by his whipping for them in a hot summer's evening, with a small artificial black gnat. Your tackle must be fine and neatly formed. He is a capital bait for the pike. Hook, No. 13.

The Minnow, or Pink.

The *minnow*, though one of the smallest fishes, is as excellent a one to eat as any of the most famed. They are generally found in March and April, and remain till the cold weather compels them to retire to their winter-quarters. He is of a greenish, or wavy sky colour, his belly very

white, his back blackish; and is a most excellent bait for any of the fish of prey: namely, the pike, trout, perch, &c. His baits are small *red worms, wasps, cads,* &c. If you can catch enough of them, they make an excellent tansy, their heads and tails being cut off; and fried in eggs, with a sauce made of butter, sugar, and verjuice.—The smallest of hooks.

The Loach, or Loch.

This fish is very small, but eats very well, and is nourishing food for sick persons. He is found in clear, swift brooks and rivulets, and his food is gravel. He is bearded like the barbel, and freckled with black and white spots. You may take him with a small *red-worm,* at ground; he delights to be near the gravel, therefore is hardly ever seen on the top of the water.—The smallest of hooks.

The Bull-head, or Miller's-thumb.

This fish, on account of its ugliness, is in some places called the *fresh-water devil;* he has a broad head and a large mouth, no teeth, but his lips are like a file, with which he nibbles at the bait. They spawn in April, and are full of spawn most of the summer. Their haunts in summer are chiefly in holes, or amongst stones in clear water; but in winter they lie in the mud like the eel. The worst of anglers may take this fish; for if you look above the water in a hot day, you may see him sunning himself on a flat stone, put your hook upon it, baited with a small *red-worm,* and he will take it directly. The taste of this fish is very good.—Hook, No. 13.

The

The Stickleback, Sharpling, or Banstickle.

This fish, with three names, as he is called by in different counties, is a small prickly fish, and not worth the angler's notice, in regard to himself, but that he is an excellent bait for the trout, who will take it sooner than the minnow. His prickles must be broke off, and baited according to the directions given for baiting the minnow, under the description of the trout.

N. B. The tackle baits, &c. for this fish, and the foregoing ones, must be the same, and very fine.

There are three fishes which I omitted in the first edition, and what anglers in general seldom meet with, because they are local, and peculiar to certain waters; but as they are held in high estimation where they are taken, I shall describe them for the reader's information.

Albula Salmoni similis—The Guinniad.

The *guinniad*, according to Camden and others, is peculiar to Pemble-Mere in Cheshire. "The river Dee," says this author, "which runs by Chester, springs in Merionethshire, and it runs towards Chester; it passes through the said Pemble-Mere, which is a large water, and it is observed, that though the river Dee abounds with salmon, and Pemble-Mere with guinniad, yet there are never any salmons caught in the Mere, nor any guinniads in the river."

Umbra Minor Gesn—The Red Charr, or Welch Torgoch.

The *red charr* is a fish whose make is longer and more slender than that of a trout, for one of about eight inches long was no more than an inch and a half broad. The back is of a greenish olive, spotted with white. The belly, about the breadth of half an inch, is painted with red, in some of a more lively, in others of a paler colour, and in some, especially the female, it is quite white. The scales are small, and the lateral lines straight. The mouth is wide, the jaws pretty equal, except the lower, which is a little sharper and more protuberant than the upper. The lower part of the fins are of a vermilion dye. The gills are quadruple, and it has teeth both in the jaws and on the tongue; in the upper jaw there is a double row of them. The swimming bladder is like that of a trout; the liver is not divided into lobes; the gall-bladder is large; the heart triangular; the spleen small and blackish; and the eggs of the spawn large and round. The flesh is more soft and tender than that of a trout, and when boiled can scarcely be allowed to be red. It is in the highest esteem where known, and in Wales is accounted the chief dish at the tables of people of fashion.

The chief place in England where this fish is taken, is Winander-Mere: but in Wales they are to be had in five different places, viz. Llamberris, Llin-Umber, Festiniog, and Beltus, in Caernarvonshire, and near Casageddor, in Merionethshire. In this last county they are smaller than in the former, and are taken in October; but

but in Caernarvonshire, in one of the lakes, they are caught in November; in another in December, and in the third in January, and when the fishing in one ends, it begins in another. Dr. Leigh says, the charr, in Coningston-Mere, which is not far from Winander-Mere, are much better, but there are reasons to suppose he was prejudiced in this article. According to Camden, the latter Mere is the largest standing-water in this kingdom, being ten miles in length; and some say it is as smooth at the bottom, as if it was paved with polished marble. They swim together in shoals, and though they appear on the surface of the water in the summer-time, yet they will not suffer themselves to be taken, either with the angle or with nets; therefore the only season for fishing, is when they resort to the shallow parts of the lakes to spawn: at these times they set trammel-nets baited, and leave them for whole days and nights, into which the fish enter of their own accord.

Carpio lacûs Benaci—The Guilt, or Gilt Charr.

The Latin writers called the gilt charr, *carpio lacûs Benaci*, because they imagined it was only to be met with in that particular lake, where it is called *roetel;* but it has since appeared to be the same fish with our gilt charr, which is bred in Winander-Mere, in the county of Westmoreland. It is proportionably broader than the trout, and the belly is more prominent; but its length, when greatest, never exceeds twelve inches: the scales are small, the colour of the back is more lively than that of a trout, and is beautified with black spots, the belly and sides,

beneath the lateral line, are of a bright silver colour; the skull is transparent, and the snout blueish: it has teeth in the lower jaw, on the palate, and the tongue; the swimming-bladder is extended the whole length of the back, and the gall-bladder is large. The flesh of the gilt charr is red, and is accounted so very delicious amongst the Italians, that they say it excels all other pond and sea fish whatever; and they esteem the nature of it so wholesome, that they allow sick persons to eat it.

Some have doubted whether the Welch and English fish, are of the same kind or not; but Mr. Ray thinks there is no room to make a doubt of it. The Welch name *torgoch*, signifies a red belly, which distinguishes the red charr properly enough: the gilt charr is, indeed, quite a different species, and is about twice as small as the red: the belly of the former is red, the flesh white, and the spots on the back white likewise; whereas the belly of the latter is of a silver colour, the flesh red, and the back is spotted with black.

" The charr and guinniad never change their shires,
" But live in Winander and Pemble-Meers."

CHAP.

CHAP. VI.

THE MOST SCIENTIFIC METHOD OF MAKING FISH-PONDS, STEWS, &c. TO WHICH IS ADDED SEVERAL ARCANA IN THE ART OF ANGLING.

IT is agreed, that those grounds are best that are full of springs, and apt to be moorish: the one breeds them well, and the other preserves them from being stolen.

The situation of the pond is also to be considered, and the nature of the currents that fall into it; likewise that it be refreshed with a little brook, or with rain-water that falls from the adjacent hilly ground. And that those ponds which receive the stale and dung of horses, breed the largest and fattest fishes.

In making the pond, observe that the head be at the lowest part of the ground; and the trench of the flood-gate, or sluice, has a good swift fall, that it may not be long in emptying.

If the pond carries six feet of water it is enough; but it must be eight feet deep, to receive the freshes and rains that should fall into it.

It would be also advantageous to have shoals on the sides, for the fishes to sun themselves in, and lay their spawn on; besides in other places certain holes, hollow banks, shelves, roots of trees, islands, &c. to serve as their retiring places. Consider further, whether your pond be a breeder; if so, never expect any large *carps* from thence;

the greatness of the number of *spawn* overstocking the pond.

Mr. *Tull*, in order to prevent the excessive increase of fish in his ponds, first practised *castration* on them, which made them grow larger than their usual size. But I think the operation peculiarly cruel, and the purpose of it only a detestable piece of Apician refinement.

For large *carps* a store-pond is ever accounted the best; and to make a breeding-pond become a store-pond, see what quantity of *carps* it will contain: then put in all *milters* or all *spawners*: whereby in a little time you may have *carps* that are both large and exceedingly fat. Thus by putting in one sex, there is an impossibility of the increase of them; yet the *roaches*, notwithstanding this precaution, will multiply. Reserve some great waters for the head quarters of the fishes, whence you may take, or wherein you may put, any quantity thereof. And be sure to have stews and other auxiliary waters, so as you may convey any part of the stock from one to the other; so to lose no time in the growth of the fishes, but employ your water as you do your land, to the best advantage. View the grounds, and find out some fall between the hills, as near a flat as may be, so as to leave a proper current for the water. If there be any difficulty of judging of such, take an opportunity, after some sudden rain, or breaking up of a great snow in winter, and you will plainly see which way the ground casts, for the water will take the true fall, and run accordingly.

The condition of the place must determine the quantity of the ground to be covered with water. For example, I may propose in all fifteen acres in three ponds, or eight acres in two, and not less;

and

and these ponds should be placed one above another, so as the point of the lower may almost reach the head or bank of the upper, which contrivance is no less beautiful than advantageous.

The head, or bank, which by stopping the current, is to raise the water, and so make a pond, must be built with the clay or earth taken out of the pan or hollow, dug in the lowest ground above the bank: the shape of the pan to be a half oval, whereof the flat to come to the bank, and the longer diameter to run square from it.

For two large ponds of three or four acres a-piece, it is advisable to have four stews, each two rods wide, and three long. The stews are usually in gardens, or near the house, to be more handy and better looked to. The method of making them, is to carry the bottom in a continual decline from one end, with a mouth to favour the drawing them with a net.

ARCANA

IN THE

ART OF ANGLING.

TO CATCH FISHES.

TAKE *Coculus Indicus*, which is a poisonous narcotic, called also *baccæ piscatoriæ*, fisher's berries, and pound them in a mortar, then make balls of the paste which will be produced (by adding a sufficient quantity of water) about the size of a pea, and throw them into a standing-water; the fish that taste of it will be very soon intoxicated, and will rise and lie on the surface of the water; put your landing-net under them, and take them out.

Coculus Indicus is a little berry, about as big as a bay-berry, but more of a kidney-shape, having a wrinkled outside, with a seam running lengthways from the back to the navel: it is of a bitterish taste, being the fruit of a tree described in the seventh volume of the *Hortus Malabaricus*, under the name of *Naslatum*, bearing leaves in the shape of a heart, and bunches of five-leaved white flowers, which are succeeded by their berries. They grow in *Malabar* in the *East Indies*. They are seldom used in physic, being accounted to be of a hurtful and pernicious nature, but their principal use is for catching fishes: the famous

Cardan's

Cardan's celebrated receipt for this purpose, runs thus: take of the berries of the *Oriental Cocus*, a quarter of an ounce; of cumin and boiling water, each two ounces; of cheese, one ounce, and of meal three ounces; after bruising them together, form them into small balls. Others mix the berries with old cheese, honey, and wheaten meal, of which they form small balls, to be thrown to fishes. Others for this purpose mix a variety of other substances with these berries; but after all their pains there is no necessity for so troublesome an apparatus, since I have known by experience, says Ray, that a simple ball of the powder of these intoxicating berries, made up with wheaten meal and water, is equally efficacious for stupifying, and at last killing, fishes; for that, fishes, as some assert, are by eating balls of this kind, only rendered vertiginous and stupid for a while, but soon return to their natural state, is not confirmed by experience; for my own experience, says Mr. Ray, quadrates with the opinion of those fishes spoken of by the learned Condronchius, who affirms that fishes are soon killed by balls of this kind. But I do not know whether, as they assert, they soon become putrid, and fall into pieces, unless they are speedily taken out of the water. If, says Condonchius, any should object, that, upon taking these balls, the fishes swim up and down with uncommon haste and precipitation, by which means their intoxication, or vertigo, is produced; I answer, that they do not ramble thus in consequence of their vertigo, but in consequence of the intolerable pain they feel from that unfriendly substance, just as other animals do, especially men, when they are racked with any intense pain. I readily grant that by these balls fishes are rendered vertiginous, and as

it were intoxicated; but at the same time, I affirm, that they are soon after killed; for I am not much of opinion that they are rendered vertiginous, and killed by the bitter and acrid, or by some hitherto unknown quality of these berries. I will not, however, take upon me to determine, whether fishes killed in this manner may be safely eaten, but with Condonchius I am of opinion, that no danger attends the use of them as an aliment, if they are gutted and boiled as soon as taken. That these berries are hot, and by means cold, as all opiates certainly are, as also Matthiolus, and others maintain, notwithstanding their narcotic quality, is sufficiently obvious from their acrid and bitter taste, as also by the other effects produced by them, as Condonchius has evidently demonstrated. This same author is of opinion, that these berries are by no means possessed of a poisonous and deletereous quality, and it is not by this, but by their bitterness and primary qualities, that fishes are killed; but the contrary to me seems plain, from a story related by Arnatus. A certain schoolmaster asking for *cubebs* from an ignorant apothecary, received these berries in their stead. When the schoolmaster had greedily devoured three or four of them, he was seized with a nausea, hiccough, and anxiety, which symptoms, together with the danger they threatened, were immediately removed by administering a vomit: the reasoning is weak, and more about words than facts, and may be equally said of opium; the absurdity of which is evident to all who know the nature and operation of hypnotics.

This description of the Oriental Cocus, I am indebted to the late ingenious Dr. Cook for, but I must beg leave to make some observations, which

seem

seem to have escaped the Doctor, and the great authorities that he has quoted.

1. I know from actual experience, that there needs no other process for making these berries up, than that which I have set down; as for the wheaten meal, which Mr. Ray mentions, it is totally useless, the plain berries pounded, and made into a paste by adding water, being a sufficient preparation.

2. It not only depends upon the size of the fishes, but upon the quantity of the paste which they pick up, which makes these berries kill the fishes, or only renders them vertiginous or intoxicated; if you then take them out with a landing net, and put them into a sufficient quantity of water, those will soon recover who have only had a small share of the paste, and may be eaten when well gutted and cleaned, with the greatest safety.

3. That these berries are of a deletereous nature, is sufficiently obvious by what has been said before. A porter brewer in London, some time ago forfeited a considerable sum for fining his liquor with these berries. It is but necessary to know these secrets; but I am sure no true lover of angling will ever make use of them.

To take a Pike as he lies basking in March or August.

Take a long pole or rod, that is light and straight, and on the small end fasten a running loop of twisted horsehair and silk, of a large compass; which gently draw five or six inches over the gills, and then hoist him on shore as quick as possible. If it is a small one, draw it not on so far, and keep very silent; you may also take him with

with a hand net, by putting it under him very gently, and then taking him up as quick as you can.

Ointments to allure Fishes to bite.

As many of my brother anglers may wish to try the efficacy of chemicals, towards encreasing their pastime, I here present them with a few receipts, and leave them to make their trials as they please.

Take gum-ivy, and put a good deal of it into a box made of oak, and chafe and rub the inside of it with this gum. When you angle put three or four worms into it, but they must not remain there long, for if they do it will kill them; then take them out and fish with them, putting more in their places as you want them out of your worm bag. Gum-ivy is a tear which which drops from the body of large ivy trees, being wounded, and is of a yellowish red colour, of a strong scent, and sharp taste; that which is sold in the shops is counterfeit, and good for nothing. Therefore, to get gum-ivy about Michaelmas, or in the spring, drive several great nails into large ivy-stalks, wriggle the same till they become very loose, and let them remain, and the gum will issue thereout.

Also slit several great ivy-stalks, at the time above-mentioned, and visit them once a month, and gather the gum which flows from the wounded part. This will very much improve the angler's success. *Probatum est.*

Take assafœtida, three drachms, camphor, one ditto, Venice turpentine, one ditto, pound altogether in a mortar, with some drops of the chemical oil of lavender, or spike. When you angle, anoint eight inches of your line with it, next your hook, and it is excellent for trout in muddy water, and for gudgeons in clear. *Probatum est.*

Assafœtida

Assafœtida grows in Media, Lybia, and Syria; it is a gummy juice of Laser, Laserpitium, or Sylphion, gathered from the root or stalk when cut open; chuse that which is pure, fine, and clammy, and smelling almost like garlic. It will keep many years, but is often adulterated by mixing meal, bran, and the gum Segapenum together.

Camphor is a resinous gum, partly flowing of its own accord, but chiefly by incision, from a tall tree growing in India: the Bornean Camphor is best. Chuse that which is white and clear like chrystal, strong scented, will easily crumble between the fingers, and being set on fire is difficult to be extinguished. There is a fictitious sort, which being put into a hot loaf will parch, but the true will melt: it will keep many years in flax-seed if it is not exposed to the air, otherwise it will evaporate and consume to nothing.

Mr. Walton, in his Complete Angler, says, that if you dissolve gum-ivy in oil of spike, anoint your bait for a pike with it, that he will take it the sooner.

I shall now give the reader the *ne plus ultra* of all these kinds of ointments, composed by Mons. Charrs, apothecary royal to Louis the Fourteenth. Take cat's fat, heron's fat, and the best assafœtida, of each two drachms, mummy, finely powdered, ditto, cummin seed, finely powdered, two scruples, and camphor, galbanum, and Venice turpentine, of each one drachm, and civet two grains. Make them, *secundum artem*, into a thinnish ointment, with the chemical oils of lavender, aniseed, and camomile, and keep it in a narrow-mouthed, and well glazed gallipot, covered with a bladder and leather, and it will keep two years. When you want to use it, put some into a small taper pewter box, and anoint your bait with it,

and

and about eight or nine inches of the line, and when it is washed off, repeat the unction. *Probatum est.*

"All arts and shapes, the wily angler tries,
"To cloak his fraud, and tempt the finny prize:
"Their sight, their smell, he carefully explores,
"And blends the druggist's and the chemist's stores;
"Devising still, with fancy ever new,
"Pastes, oils, and unguents, of each scent and hue."

How to make Fish-hooks.

In order to make a good hook, there are requisite a hammer, a knife, a pair of pincers, an iron semi-cleam, a file, a wrest, a bender, tongs, both long and short, an anvil and steel needles of different sizes. Heat a needle of the size you want, in a charcoal fire, and raise the beard with your knife, then let it cool. Sharpen the point, either with a file or on a grindstone, then put it into the fire again and bend it into what shape you please; make the upper part of the shank four square, and file the edges smooth, then put it into the fire a third time, and heat it gently; take it out suddenly, and plunge it into water, and your operation is finished.

Use not a small hook for great baits, nor a large one for small ones:—*Barbels* and *chubs* must have large ones, but *perches, tenches, breams,* and *eels,* much smaller. *Trouts* in clear waters, *graylings, salmon-smelts, roach* and *dace, ruffs* and *gudgeons,* must have small hooks: and, though many angle for *trouts* with large hooks in thick waters, yet small ones are the best. Experience will point out the inconvenience of large hooks.—The noble *salmon* alone must have a large one.

A Glue

A Glue for Angling-rods.

Pour some water on some quick lime, until the ebullition ceases, then pour the water from it, and boil your glue very gently with this water, and it will make a very good glue.

A Receipt that renders Leather more capable to keep out Wet.

As dry feet are very necessary to health, I have copied an excellent receipt for the angler's use, that will prevent his boots or shoes letting in water. Take a pint of lintseed oil, with half a pound of mutton suet, six or eight ounces of bees wax, and a halfpenny worth of rosin; boil all these in a pipkin together, and then let it cool till it be lukewarm; take a little hair brush, and lay it on your boots; but it is much better to be laid on the leather before the boots are made, and brushed with it once over when they are; as for your old boots or shoes, you must brush them with it when they are dry. As I am now acting the part of physician, let me advise you, whenever you are out in the heat of summer, fishing, and are thirsty, never to drink water, as the consequences arising from such an indiscretion may prove fatal; but either take a little brandy or rum out with you, in a wicker bottle, or wait till you come to some house where you can have a little; the effects it has of quenching the thirst, and cooling the body, are instantaneous.

The angler being now furnished with every requisite for the art of ground angling, his strictly adhering to the theory laid down, in his practice, is the only thing he has to do, and he may depend

pend on his endeavours being crowned with success. The second part of this little essay will treat of *artificial fly-fishing*, under every head that can prove of utility to the angler; which certainly bears the bell in that delightful recreation, that adds strength and vigour to the body, keeps the mind in a perfect state of serenity and tranquillity, and alleviates the cares and troubles attendant on mortality.

In short, how delightful is every species of this diversion, in such a paradise as the Poet describes:

Behind, where alders from the weather screen,
Before the lawn presents its lengthen'd scene:
Close on that side trills soft the emptying brook,
While this fresh woods and sloping hills o'erlook:
Thick over head the rose and woodbine meet,
Uniting shade to shade, and sweet to sweet;
The pea and blooming bean their odours yield.
And new-mown hay perfumes the fragrant field.
To hear the nightingale delights the meads,
And grashoppers chirp shrill amid the reeds;
While from the pinfold, there, the bleeting sheep,
Cheer the still twilight, and divert from sleep;
The gale's perfume, the echo's mimic sound,
The night-bird's song, and lowing kine around;
In hollow banks the hum of must'ring bees,
And zephyrs whisp'ring soft amid the trees.

END OF THE FIRST PART.

PART II.

THE

COMPLETE FLY-FISHER;

OR

EVERY MAN HIS OWN FLY-MAKER.

With pliant rod athwart the pebbled brook,
Let me with judgment cast the feather'd hook,
Silent along the mazy margin stray,
And with the fur-wrought fly delude the prey.
To frame the little animal, provide
All the gay hues that wait on female pride:
Let Nature guide thee, sometimes golden wire
The shining bellies of the fly require;
The peacock's plumes thy tackle must not fail,
Nor the dear purchase of the sable's tail.
Each gaudy bird some slender tribute brings,
And lends the growing insect proper wing:
Silks of all colours must their aid impart,
And every fur promote the fisher's art.

GAY.

THE

COMPLETE FLY-FISHER,

&c. &c.

CHAP I.

OBSERVATIONS CONCERNING ARTIFICIAL FLY-ANGLING, WITH PROPER DIRECTIONS FOR THE ANGLER'S RODS, LINES, *&c.*

THE art of *artificial fly-fishing*, certainly has the pre-eminence over the other various methods that are used to take fishes in the art of angling. It requires a great deal of ingenuity and attention, and the variety, which attends it, make it one both pleasant and agreeable. The angler is not confined to any particular part of the water in fly-fishing, but roves from one place to another, trying his fortune, by throwing his flies into the different eddies, and the most likely places he meets with, to make a captive of the speckled trout: enjoying at the same time the harmonious warblings of the numerous songsters of the groves: beholding the diversity of the prospects spread around him, and gaining that health and serenity of mind, not to be purchased by all the riches in the universe.

The

The imitations of nature, in regard to the flies necessary for use suiting the different colours so exactly as to resemble the natural fly; and observing the greatest nicety in regard to its ymmetry; contribute to make it still more delightful. Whenever he makes a fly, let him have the natural one always before him, which will enable him to be a competent judge of the materials most necessary to dub it with; a list of which, and of the best way to make the *Palmer* and *May-fly*, (which are the ground of artificial fly-angling, I shall give him by and by;) for if he is not able to make his own flies, he never will be a good fly-fisher, nor experience that pleasure, which he will receive by taking fishes with one of his own making. He must never think a fly ill made, because it will not kill fishes as well as in any other river as that he particularly angles in; because the same flies differ very much both in color and size in different counties; besides which, *flies* that will be taken on their peculiar water one year in April, will perhaps not be taken in the next till the middle of May, the whole depending on the warmth or coldness of the season.—Mr. Taylor in his treatise, where he describes the superiority of *fly-fishing*, to the other branches of angling, with great humour observes, that the angler is surprised, at the manner in which the *fish* take the *flies*; and by seeing their surprize, when they find they are hooked, by rising at the *flies!!!* I shall now proceed to give the angler a description of the rods and lines, bet calculated for *artificial fly-fishing*; but before I do, shall make this one observation: that theory, without practice, can never make a man a proficient.

Rods

Rods and Lines proper for Artificial Fly-fishing, &c.

As for your *artificial fly-rod*, the directions given in the first part of this treatise are sufficient, only be careful that the materials which it is composed of are well seasoned, and free from knots, and that the whole is exactly perfect in regard to symmetry.

The length of the fly-rod is generally from about fourteen to seventeen feet long; which is long enough for any one who understands fly fishing to throw twelve yards of line, with one hand, and seventeen with both.

To make a fly rod, that will be exceedingly neat and pleasant in hand, you must observe the fellowing method:

Procure a nice breadth of ash plank, free from knots, perfectly sound, and about seven feet long; let it be turned in the lath so as to run taper from the but end, which should be so thick and no more than you can with ease grasp in your hand; then have it ferrelled, or bind it to a piece of hazel seven feet long, and in exact taper proportion to the ash. As you may not be able to get a piece of hazel so long, that will run perfectly taper, it may consist of two or three pieces; then add to the hazel a nice piece of yew (in the same proportion to the hazel as that is to the ash) two feet long, made round, taper, and smooth, and to that, piece a bit of small round, and taper whale-bone, six inches long; then the rod will be completed; and if just symmetry is observed through the whole, it will be a most excellent one.

Some use deal for making the bottom of the rod, because they say it is more light; but I in answer to that aver, that is is not half so strong

and

and lasting, and that the ash, on account of its strength, may be turned in the lath, or planed down to be every jot as light as the deal, and that the angler, when he has hooked a good fish, need never fear it snapping short, as deal will, because it is the nature of the wood to bend almost double, and will always, if well seasoned, return to its former straitness. Let your rod, thus made be ringed for the line to pass through, with small brass rings, about a foot distant from each other, and at the but end let there be a spike made to screw in, which you will find very convenient; and you may, if you like to alter the colour of your joint (though it does not signify so much in ash as in deal, whose whiteness would scare the fish) first warm it before the fire, and then dip a feather in aquafortis, put it on the ash, and then chafe it with your hand, and it will make it a cinnamon, or rather a puce, or flea colour.

Your fly line should be about thirty yards long, and wound on a small brass multiplying winch, which is to be placed on the but of your rod; then you must run the line through the rings before-mentioned, and you may always command the length without the trouble of changing the line, and shorten it when you come to places encumbered with wood. The general length that you should have off your reel must be about four yards longer than your rod, nay, sometimes the line must be twice the length of the rod; for to fish fine and far off is the standing rule for trout fishing But it will be a long time before you are able to throw a dib line with nicety at the general length, yet as you can always lengthen or shorten it by means of the winch, you may, if you are expert, and are a true lover of angling, after some trials accomplish

accomplish it. Never incumber yourself with too much line at first, but increase the length of it as you find you make improvement; and as it is ten to one, that you lose a fly every time you cast your line, until you are arrived at some degree of perfection in doing it, it will not be amiss to practise sometimes without one. But let me return to the subject: your line should run taper from the top of the rod down to the fly, that is, if the first link is composed of thirty-five hairs, the next must be of thirty-four; so leaving out one hair in each link, till the whole is completed; then comes the silk-worm gut, on which you should whip all your hooks.

But the best lines for artificial fly-angling are those that are wove, and are all one piece, and are to be bought at any of the shops in London, where fishing-tackle is sold, and run taper like the lash of a coach-whip, and may be had at any length; as from thirty to forty yards, &c.

These are the only lines that can be used on a winch; because they have no knots to prevent them running glibby through the rings of the rod.

By the line being made taper, you will be able to throw it into any place you like with a greater exactness, and it will fall much lighter on the water, which will very much increase your sport.

The reader now being informed of the rod and lines best calculated for *artificial fly-fishing*, I shall in the next chapter give him a list of the materials he must be in possession of before he attempts to make flies, and afterwards give him the best instructions for making them.

CHAP. II.

A LIST OF THE MATERIALS NECESSARY FOR AN ANGLER TO HAVE, AND THE BEST METHOD TO MAKE THE PALMER AND MAY FLY.

Hog's Down,

COMBED from the roots of the bristles of *black*, *red*, *whitish*, and *sandy*-coloured hogs; the white down you may have dyed to any colour you like. It is excellent dubbing, because it will stand the water and shines well. To be a competent judge of the real colour of any dubbing, you must hold it between the sun and your eyes. This is a standing rule when you imitate a fly.

Camel's Hair,

Of a dark and light colour, and one in the medium of both.

Badger's Hair,

The brown soft fur which is on the skin, and the blackest.

Bear's Hair,

Grey, dun, light and dark coloured, bright brown, and shining brown.

Spaniel's

Spaniel's Hair,

From the different parts of a spaniel, especially from behind the ear, brown, dark brown, light brown, and black.

Sheep's Wool,

Of all colours, both natural and artificial; you may have it dyed to any colour.

Seal's Fur,

To be had at the trunk-makers; get it dyed from the lightest to the darkest brown, and you will find it much better dubbing than cow or calves' hair.

Mohairs,

Of all colours, black, blue, purple, white, violet, yellow, and tawney, philomot from feuille morte, a dead leaf; and Isabella, which is a whitish yellow, or soiled buff colour.

Cow's Hair,

The softest you can get from a black, brindled, and rew cow; and of these colours, have brown, dark brown, light brown, and black.

Colt's or Calve's Hair.

These afford very good dubbing, and a variety, especially those hides that have been tewed, or dressed in a Skinner's lime pit; but, as I said be-

fore, seal's fur dyed is much better than either cow's or either of the hairs of these two; because it is not so harsh, and does not require so much trouble to work it on the hook; and observe further, that this fur is for small flies, and hog's down for large ones.

Camlets,

Both hair and worsted of all colours, blue, yellow, dun, brown, dark brown light brown, red violet, purple, black, horse-flesh, pink, and orange.

Furs,

Off the squirrel, especially his tail; a hare, the part off the neck which is a whithered fern colour; foxcub from the tail where it is downy and of an ash colour; an old fox, and old otter, otter-cub, futimart, or filmert; a mole, a black cat's tail; a house-mouse, and water rat; a marten, particularly from off the gills, or spots under the jaws, which is of a fine yellow. These are all to be had at the furriers.

Hackles.

These are the feathers that hang from the head of a cock, down his neck, and likewise near his tail, they are particularly used in making the palmer fly; get the following colours of them, viz. red, dun, yellowish, white, orange, and black; let not the fibres of them be above half an inch long. Whenever you meet with a cock, whose hackle is of a strong brown red, buy him, and make the most

most of the hackles. Note, the feathers of a bantam or cock chick, are good for nothing.

Feathers.

To make the wings of artificial flies, &c. it is necessary to be provided with all kind of feathers; procure therefore those from the back, and other parts of the wild mallard or drake; of a partridge, particularly the red ones in the tail; those of a cock-pheasant's breast and tail; also the wings of a stare or starling, jay, land-rail, black bird, throstle, fieldfare, water-coot, and a brown hen; likewise the top, or cop, of a pevit, plover, or lap-wing, peacock's herl, green, copper-coloured, and white, also black ostrich's herl, and feathers from the neck and wings of a heron. Observe, that in many instances hereafter that you will meet with, where the mallard's feather is set down for the wings of an artificial fly, that the starling will be preferable, because it is of a finer grain, and will not imbibe the water so much.

Carpets and Blankets.

There is very good dubbing to be got from blankets, also from an old Turkey carpet; untwist the yarn, and pick out the wool, then separate the colours, wrap them up in different papers, and lay them by.

Silks, &c.

Of all colours, straw silk, gold and silver flatted wire, or twist; hooks in small chip boxes, with the number of the size of each marked on

the outside: wax of all colours, and needles; a sharp pen-knife, and a small sharp pair of scissars, made quite angular, with large bows for the fingers.

N. B. When you make the palmer-fly, suit the colour of the silk to the hackle you dub with; a dun hackle requires yellow silk; a black hackle, sky-blue silk; a brown, or red hackle, red silk; when you make flies that are not palmers, dub with silk that resembles the colour most predominant in the fly; and in making your flies, remember to mix bear's hair and hog's down, with your other dubbing, because they repel the water; make your flies always in hot sun-shiny weather, for your waxed silk will then draw kindly; and when you take the dubbing to imitate a fly, always wet it, and then you will be perfect in your imitation; for although the dubbing when dry may suit, yet when it is wet it may be quite another colour. Marten's fur is the best yellow you can use.

How to make the Palmer and May-Fly.

First lay all the materials by the side of you, viz. half a yard of fine round even silk worm gut: half a yard of red silk, well waxed with wax of the same colour: a hook, the size No. 6: a needle: some strands of an ostrich's feather, and a fine red hackle: then take the hook, and hold it by the bend, between the fore-finger and thumb of your left hand, with the shank towards your right hand, and with the point and beard of your hook not under your fingers, but nearly parallel with the tops of them: afterwards take the silk, and hold it likewise about the middle of it, with your hook, one part laying

along

along the inside of it to your left hand, the other to the right; then take that part of the silk which lies towards your right hand, between the fore finger and thumb of that hand, and holding that part towards your left, tight along the inside of the hook, whip that to the right, three or four times round the shank of the hook towards the right hand; after which take the *silk worm gut*, and lay either of its ends along the inside of the shank of the hook, till it comes near the bend of it: then hold the hook, silk, and gut, tight between the fore-finger and thumb of your left hand, and afterwards give that part of the silk to your right hand, three or four whips more over both hook and gut till it comes near the end of the shank, and make a loop and fasten it tight: then whip it neatly again over both silk, gut, and hook, till it comes near the bend of the hook: after which make another loop, and fasten it again: then, if the gut should reach farther than the bend of the hook, cut it off, and your hook will be whipped on, and the parts of the silk hang from the bend of it.

Having proceed so far, wax the longest end of the silk again, and take three or four strands of an ostrich's feather, and holding them and the hook, as in the first position, the feathers to the left hand, and the roots of them in the bend of the hook, with the silk that you waxed last, whip them three or four times round, make a loop, and fasten them tight; then turning the strands to the right hand, and twisting them and the silk together, with the fore-finger and thumb of your right hand, wind them round the shank of the hook till you come to the place where you first fastened, then make a loop, and fasten them again; if the strands should not be long enough to wind as far as is necessary

round the shank, when the silk gets bare you must twist others on it. Having performed this, take your scissars and cut the body of the palmer into an oval form, that is, small at the bend and the end of the shank, but full in the centre; do not cut too much of the dubbing off. Now both the ends of the silk are separated, one at the bend, another at the end of the shank, wax them both again; then take the hackle, hold the small end of it between the fore-finger and thumb of your left hand, and stroke the fibres of it with those of your right the contrary way from which they are formed; hold your hook as in the first position, and place the point of the hackle in its bend, with that side which grows nearest the cock upwards, and then whip it tight to the hook; but in fastening it, tie as few fibres in as you can possibly avoid: the hackle being fast, take it by the great end, and keeping the side nearest the cock to the left hand, begin with your right hand to wind it up the shank upon the dubbing, stopping every second turn, and holding what you have wound tight with your left fingers, whilst with the needle you pick out the fibres you will unavoidably take in; proceed in this manner till you come to the place where you first fastened, and where an end of the silk is: then clip off those fibres of the hackle which you held between your finger and thumb, close to the stem, and hold the stem close to the hook; afterwards take the silk in your right hand, and whip the stem very fast to the hook: then make a loop, and fasten it tight: take your pen-knife, and if that part of she stem next the shank of the hook is as long as a part of the hook which is bare, pare it it fine, wax your silk, and bind it neatly on the remaining bare part of the hook: then

then fasten the silk tight, and spread some shoemaker's wax very lightly on your last binding: after that clip off the ends of the remaining silk, both at the shank and bend of the hook, and all fibres that start or stand ill-conditioned, and the whole is completed.

This is called the *palmer-fly* or *plain hackle*, and may, instead of the ostrich's feather abovementioned, be dubbed with black spaniel's fur, and is a very excent killer. There are three more palmers, which are all to be made in the same manner as I have laid down, only with different articles, which are as follows:

Great Palmer, or Hackle.

Dubbed the same as the *plain hackle* with the strands off an ostrich's feather, or a black spaniel's fur, and warped with red peacock's hackle, untrimmed, that is, leaving the whole length of the hackle staring out (for sometimes the fibres of the hackle are to be shortened all over, sometimes barbed only a little, and sometimes close underneath) leaving the whole length of fibres on the top, or back of the fly, which makes it swim better, and, on a whirling ground water, kills great fish. Your hook for this *palmer*, No. 5.

Golden Palmer, or Hackle.

The same dubbing, ribbed with gold twist, and a *red hackle* over all.

Silver Hackle.

Made with a black body also, silver twist over that, and a *red hackle* over all.

The variation that is to be observed in making the *gold* and *silver palmers* is this, that when you whip the end of the hackle to the bend of the hook, you must also do the same to the gold or silver *twist*, and first wind either of them on the dubbing, observing that they lie flat on it, and then fasten off; afterwards proceed with the hackle as directed: or you may wind the hackle on the dubbing first, and rib the body with either of the twists afterwards.

These are the standard hackles in fly-fishing, and are taken any month in the year, from nine to eleven in the morning, and from one to three in the evening, and upon any water; though you must have different sizes of them, and dubbed with different colours, that you may always be able to suit either a clear or a dark water, or a bright and cloudy atmosphere; observing, "that small light-coloured flies are for clear waters and skies, and the largest for dark and cloudy ones.

These *palmers* (as I said before) being taken every month in the year, when I come to treat of the flies proper for each month, I shall not take any notice again of the four which I have set down, for that would be totally unnecessary; but the others that deviate in their size and dubbing from the general rule, will be fully expressed.

The angler should always try the *palmers* first, when he fishes in a river that he is unaccustomed to; and even in that which he constantly uses, without he knows what fly is on the water, and they should never be changed till he does; the only way to come to the true knowledge of which, he must observe an old-established rule laid down for that purpose; and as it is poetically described by Mr. Gay, I shall give it him in that dress.

Mark

Mark well the various seasons of the year,
How the succeeding insect race appear;
In this revolving moon one colour reigns,
Which in the next the fickle trout disdains.
Oft have I seen a skilful angler try
The various colours of the treach'rous fly;
When he with fruitless pain hath skimm'd the brook,
And the coy fish rejects the skipping hook,
He shakes the boughs, that on the margin grow,
Which o'er the stream a waving forest throw;
When if an insect fall (his certain guide)
He gently takes him from the whirling tide:
Examines well his form with curious eyes,
His gaudy vest, wings, his horns, and size;
Then round his hook the chosen fur he winds,
And on the back a speckled feather binds;
So just the colours shine through ev'ry part,
That Nature seems to live again in art.

The best Method to make an Artificial fly, not a Palmer.

First hold your hook fast betwixt the fore-finger and thumb of your left hand, with the back of the shank upwards, and the point towards your right hand; then take a strong small silk, of the colour most predominant in the fly you intend to make, wax it well with the wax of the same colour, and draw it between your finger and thumb to the head of the shank, then whip it twice or thrice about the bare hook, which prevents it slipping, and the shank of the hook from cutting the gut: which being done, take your gut and draw it likewise between your finger and thumb, holding the hook so fast as only to suffer it to pass by, till the end of the gut is

near the middle of the shank of the hook, on the inside of it; then whip the silk twice or thrice about both gut and hook, as hard as the strength of the silk will permit; after that take the wings, which before you began to make your fly you had stripped off the stem for its wings, and proportional to it, and which lie with your other materials by you, (as they always should before you begin) and place that side downwards which grew uppermost before, upon the back of the hook, leaving so much only, to serve for the length of the wings of the point of the plume, laying it reversed from the end of the shank upwards; then whip your silk twice or thrice about the root-end of the feather, gut, and hook; which being done, clip off the root-end of the feather close by the arming, and then whip the silk fast and firm about the hook and gut till you come to the bend of it; and then, if the gut goes beyond the bend of the hook, cut it off, and make all fast: take then the dubbing which is to make the body of your fly, as much as you think will do, and holding it lightly with your hook, between the finger and thumb of your left hand, take the silk with the right, and twisting it between the finger and thumb of that hand, the dubbing will spin itself about the silk, which, when it has done, whip it about the armed hook, till you come to the setting on of the wings: afterwards take the feather for the wings divide, it into two equal parts, and turn them back towards the bend of the hook, the one on the one side, the other on the ather side of the shank, holding them fast in that posture, between the fore-finger and thumb of your left hand; which being done, warp them so down as to stand, and slope towards the bend of the hook; and having waped up to the end

of

of the shank, hold the fly fast between the finger and thumb of your left hand, and then take the silk between those of your right, and where the warping ends, pinch or nip it with your thumb-nail against your finger, and strip away the remainder of your dubbing from the silk, which wax again, and then with the silk which is newly waxed and bare, whip it once or twice about, make the wings stand properly, then fasten and cut it off: after which, with the point of a needle, raise up the dubbing gently from the warp, twitch off the superfluous hairs of your dubbing, leave the wings of an equal length, (or your fly will never swim true) and the whole is completed.

In this manner you are to make the *May-fly*, or *Green-drake*, and all other flies that are not palmers; the materials to make the green drake are the following: Your hook must be No. 5, and you must have the white-grey feather of a mallard for the wings, dyed yellow; the dubbing camel's hair, bright bear's hair, yellow camlet, and the soft down that is combed from the bristles of a hog, well mixed together, the body must be long, and ribbed about with green silk, or rather yellow, waxed with green wax, and three long hairs for his tail, from those off a sable's.

Or, the *May-fly* may be dubbed after this method. The body of seal's fur, or yellow mohair, a little fox-cub down, and hog's down, or light brown from a turkey carpet, mixed together, warp with green and yellow, pale yellow, or red cock's hackle under the wings, which are to be the same as in the other method of dubbing it.

As I shall not mention the *green-drake* when I come to describe the other flies taken in the month of May, I will here give you every particular concerning

cerning it. He comes on the water the twentieth of that month, and is taken all day long, but best from two to four in the evening, and kills most fish from the end of May to the ninth of June.

How to dye the Mallard's feather yellow.

Take the root of a Barbary tree, and shave it, and put to it *woody viss*, with as much alum as a walnut, and boil your feathers in it with rain water, and they will be of a fine yellow; or get a little *weld* and *recou*, and boil your feathers with them, and it will answer the same purpose.

CHAP. III.

THE NAMES AND THE BEST MANNER OF DUBBING THE DIFFERENT ARTIFICIAL FLIES, WHICH ARE GENERALLY KNOWN, AND WILL KILL FISHES ON ANY WATER, FROM THE BEGINNING OF MARCH TO THE END OF SEPTEMBER.

I SHALL begin fly-fishing with the month of March, that being soon enough to throw a fly on the water; nay, in some years is too soon, owing to the backwardness of the season. The inclemency of the weather, before that time, renders the attempt not only unpleasant, but fruitless, to endeavour to take fishes with the fly; and the risk a man runs of impairing his health, before the weather is mild and temperate, forms an objection more strongly against

against it. Let an angler be ever so fond of fly-fishing, he will certainly have enough, perhaps a satiety, between the months of March and September; besides the mind of man is fond of variety, and there are amusements of the field very pleasant and conducive to health; for I myself am entirely of Terence's opinion, that

Ad primè in vita esse utile, ut nequid *nimis.*

MARCH.

THE PALMERS.

1. The *Dark Brown.*
2. The *Great Whirling Dun.*
3. The *Early Bright Brown.*
4. The *Thorn, or Hawthorn Tree-Fly.*
5. The *Blue Dun.*
6. The *Little Black Gnat.*
7. The *late bright Brown.*

1. Dubbed with the brown hair off the shank of a brindled cow, and the grey feather of a drake for wings.

2. Dubbed with the fur from the bottom of a squirrel's tail, and the wings off the grey feather of a drake. Or, dubbed with squirrel's fur, mixed with about a sixth part of fine hog's down, the wings of a pale orange colour, taken from the quill feather off a ruddy hen, the head to be fastened with ash-coloured silk, and a red unbarbed cock's hackle may be warped under the wings, and a turn or two lower towards his tail. *This is a very killing fly, and is taken best late in the evening of a blustering warm day.*

3. Dubbed with the brown hair off a spaniel, taken from behind the ear, or with that off a red cow's

cow's flank; the wings, the grey feather off a wild drake.

4. Dubbed with seal's fur, dyed a perfect black, mixed with a little Isabella-coloured mohair, the body made small, and the wings off a bright mallard's feather. *A killing fly.*

5. Dubbed with the down combed from the neck of a black greyhound, or the roots of a fox-cub's-tail, mixed with a little blue violet worsted, upon a hook, the size No. 9. the wings off the pale part of a starling's feather. *This fly is a killing fly, and is taken from eight to eleven, and from one to three.*

6. Dubbed with black mohair, upon a hook the size No. 9. and the wings the lightest part off a starling's feather.

7. Dubbed with the hair off a cow, or calf's hide, which has been drest in a skinner's lime-pit; if you hold it between your eyes and the sun, it will appear of a bright gold, or amber colour; the wings off a feather of a brown hen.

APRIL.

PALMERS.

1. The *Dark Brown.*
2. The *Violet Fly.*
3. The *Little Whirling Dun.*
4. The *Yellow Dun.*
5. The *Horse-flesh Fly.*
6. The *small Bright Brown.*

1. Dubbed on a small hook, No. 8. or 9, with brown seal's fur, or with brown spaniel's fur, that looks ruddy, by being exposed to the weather, mixed with a little violet camlet; warp with yellow

low silk, and the wings off the grey feather of a mallard.

Kills best from eight to eleven.

2 Dubbed with dark violet stuff, and a little dun bear's hair mixed with it; the wings, off the grey feather of a mallard.

Kills very well from the sixth to the tenth of this month.

3. Dubbed with fox-cub down, ash-coloured at the roots, next the skin; ribbed about with yellow silk, the wings off a pale grey feather of a mallard. Or, dubbed with the same down, and a little ruddy brown mixed, warped with grey, or ruddy silk, a red hackle, under the wings, which must be made from the feather of a land-rail, or ruddy brown chicken, which is better.

This fly comes on the water the twelfth of this month, and is taken in the middle of the day, all the month through, and in blustering weather to the end of June.

4. Dubbed with camel's hair, and marten's yellow fur, mixed together; or with a small quantity of pale yellow cruel, mixed with fox-cub down from the tail, warped with yellow silk; and the wings off a pale starling's feather.

This fly is taken from eight to eleven, and from two to four.

5. Dubbed with blue mohair, and with pink and red colour *tammy*, mixed, a brown head and light-coloured wings.

This fly is taken all the month two hours before sun-set till twilight.

6. Dubbed with spaniel's fur, the wing's the lightest part off a stare's feather.

Taken very well in a bright day and clear water.

MAY.

PALMERS.

The May-fly.

1. The *Dun Cut.*
2. The *Stone-fly.*
3. The *Black May-fly.*
4. *Little Yellow May-fly.*
5. The *Grey Drake.*
6. The *Camlet-fly.*
7. The *Cow-Dung-fly.*

1. Dubbed with bear's hair, of a brownish colour, with a little blue and yellow mixed with it; the wings off a brown hen, and two horns at the head from the hairs off a squirrel's tail. Or, dubbed with bear's cub fur, a little yellow and green cruel mixed with it, warped with yellow, or green; wings off a land-rail. *A great killer in the evening of a showery day.*

2. Dubbed with dun bear's hair, mixed with a little brown and yellow camlet, so placed that the fly may be more yellow on the belly, and towards the tail, than any where else; place two or three hairs off a black cat's beard on the top of the hook, in the arming it, in such a manner that they may be turned up when you warp on the dubbing and stand almost upright, and start one from the other, rib the body with yellow silk, and make the wings very large off the dark grey feathers of a mallard. The hook No. 3. *This is a very great killer, and comes on the water about the middle of April, and continues till the end end of June; it is generally used in swift streams, but if there is a good wind stirring it will be taken in the deeps; it is taken but indifferently in the middle of the day, but excellently late and early.*

3. Dubbed

3. Dubbed with the strands off a black ostrich's feather, ribbed with silver twist, and a black cock's hackle over all.

A good killer, but not to be compared with the Green Drake, or Stone-fly.

4. Dubbed with yellow camlet, or yellow marten's fur, the wings of a mallard's feather dyed yellow. This fly is to be made very small, but exactly in the shape of the green drake.

5. Dubbed with whitish hog's down, mixed with black spaniel's fur, ribbed with black silk: black cat's beard for the whisk's of the tail, and the wings off the black grey feather of a mallard. Or, dubbed with white ostrich's feather; the end of the body towards the tail, off peacock's herl, warping of ash-colour, with silver twist, and black hackle, and the wings a dark grey feather of a mallard.

A very killing fly, especially towards an evening, when the fishes are glutted with the green drake.

6. Dubbed with dark brown shining camlet, ribbed over with very small green silk, and the wings off the double grey feather of a mallard.

It will kill small fishes, and continues till the end of June.

7. Dubbed with light brown and yellow mixed or dirty lemon-coloured mohair, with the same coloured hackle under the wings, which may be either made of the feather off a land-rail, or a dark grey feather of a mallard.

The size of the hook, No. 7.

This fly is used in cold windy days.

JUNE.

THE PALMERS.

1. The *Ant Fly.*
2. The *Purple Gold Palmer.*
3. The *Little Black Gnat.*
4. The *Brown Palmer.*
5. The *Great Red Spinner.*
6. The *Small Red Spinner.*

1. Dubbed with brown and red camlet mixed; the wings the pale part off a starling's feather.

2. Dubbed with purple mohair, ribbed with gold twist, and red cock's hackle over all.

3. Dubbed with the black strands off an ostrich's feather, upon a hook the size No. 9. and the wings off the lightest part of a starling's feather.

A great killer after a shower of rain, especially in an evening.

4. Dubbed with light brown seal's hair, warped with ash coloured silk, and a red hackle over all.

5. Dubbed with seal's fur dyed red, and brown bear's hair mixed together, but there must be bear's hair sufficient to make the body appear of a dullish red, ribbed with gold twist, the wings off a stare's feather; and red cock's hackle over the dubbing. The hook, No. 7.

This fly kills very well till the latter end of August from six o'clock till twilight upon a dark coloured water.

6. Dubbed with the yellow off a spaniel, taken from behind the ear, ribbed with gold twist, a red hackle over all, and the wing's off a starling's feather. The hook, No. 8 or 9.

This fly kills exactly at the same time the other spinner does, but when the water is very clear.

JULY.

JULY.

THE PALMERS.

1. The *Badger Fly.*
2. The *Orange Fly.*
3. The *Wast Fly.*
4. The *Black Palmer.*
5. The *Black Silver Palmer.*
6. The *July Dun.*

1. Dubbed with the soft brown fur off a badger's skin, warped with red silk, the wings off the dark grey feather of a mallard; the head must be red.

This fly is an excellent killer, and in some rivers is taken in March and April.

2. Dubbed with orange coloured wool; the wings off the feather of a black-bird's wing. Or, dubbed with raw orange silk, warped with silk of the same colour, ribbed with gold twist, and a black or red hackle over all.

This fly is taken in June when the May-fly is over, in hot gloomy weather, and till the end of this month.

3. Dubbed with brown bear's hair, or the fur off a black cat's tail; ribbed with yellow silk; and the wings off the pale feather of a stare's wing.

4. Dubbed with the herl off a copper-coloured peacock's feather, with a black cock's hackle over it.

5. Dubbed the same as the *Black Palmer;* ribbed with silver twist, and black hackle over all.

6. Dubbed with the down off a water-mouse, mixed with bluish dyed seal's fur; or, dubbed with the fur off a mole, mixed with a little marten's fur; warped with ash-coloured silk; the wings off the feather of a blue pigeon's wing. *A good killer.* The size of the hook, No. 9.

AUGUST.

THE PALMERS.

1. The *Late Ant Fly.*
2. The *Fern Fly.*
3. The *White Palmer.*
4. The *Hearth Fly.*
5. The *Pale Blue.*
6. The *Harry Long Legs.*

1. Dubbed with the hair off a cow that is of a blackish brown; warp some red in for the tag of his tail, the wings off the feather of a brown hen. *An excellent killer.*

2. Dubbed with the fur off a hare's neck of a fern colour; the wings off a darkish grey feather off a mallard's.

3. Dubbed with the white herl off a peacock's feather, and a white hackle over all.

4. Dubbed with the wool off an aged black ewe, mixed with some grey colt's hair; the wings off those of a starling's.

5. Dubbed with very light blue fur, mixed with a little yellow marten's fur, and a blue hackle over all, the wings off the feather of a blue pigeon.

A very killing fly from ten in the morning till three in the evening. The hook, No. 3.

6. Dubbed with darkish bear's hair, mixed with a little blue wool, and a brown hackle over all. Or dubbed with lightish bear's hair, mixed with a few hairs of light blue mohair, and a little fox-cub down, warped with light grey or pale blue silk, and a dunnish hackle over all; the head made large.

Taken chiefly in a cloudy windy day. The hook, No. 5.

SEPTEMBER.

SEPTEMBER.

THE PALMERS.

1. The *Peacock Hackle.*
2. The *Camel Brown.*
3. The *Late Badger.*
4. The *September's Dun.*

1. Dubbed with peacock's ruddy herl; warped with green silk, and a red cock's hackle over all.

2. Dubbed with the hair pulled out of the lime of an old wall; warped with red silk, and the wings off the darkish grey feather of a mallard.

3. Dubbed with the fur off a black badger's skin, mixed with the softest yellow down off a sanded hog, and the wings off the feather of a dark grey mallard.

4. Dubbed with the down off a mouse; warped with sad ash-coloured silk; and the wings off the dark-coloured feather of a stare's. The hook, No. 9.

I have given the reader forty-seven of the best flies used in *fly-fishing*, and what are generally known; with the best methods of dubbing them; and which, if he pays attention to, and makes his exceptions with judgment, he may in time become an excellent fly-fisher.

A Selection

A Selection from the foregoing List of Flies, that will kill Fish in any part of England and Wales, particularly Trout.

THE PALMERS.

5. *Great Dun.*
6. *Dark Brown.*
7. *Early Bright Brown.*
8. *Late ditto.*
9. *Black Gnat.*
10. *Yellow Dun.*
11. *Grcat Whirling Dun.*
12. *Little ditto.*
13. *Dun Cut.*
14. *May Fly.*
15. *Grey Drake.*
16. *Camlet Fly.*
17. *Cow-dung Fly.*
18. *Little Ant Fly.*
19. *Badger Fly.*
20. *Fern Fly.*
21. *Stone Fly.*

N. B. There are two *salmon-flies*, which are the principal ones, called the *Dragon* and *King's-fisher*, about two inches long, which may be made according to fancy; but of the most gaudy feathers there are, especially the peacock's, for they will rise at any thing gaudy, and, where there are plenty, at *Trout-flies.*

There are likewise two *moths* which I have omitted, great killers about twilight in a serene evening; and the *humble-bee*, a famous chub-killer, any time of the day. They are dubbed in the following manner:

The *brown-moth*—the wings off the feather of a brown owl; dubbed with light mohair, with a dark grizzle cock's hackle for the legs; and a red-head.

The *white-moth*—dubbed with the white strands of an ostrich's feather; wings off the feather of a white

white pigeon's wing; a white hackle for the legs, and a black head. The hooks for both, No. 2.

The *humble-bee*—dubbed with black spaniel's fur; a black cock's hackle over that; the tag of the tail to be of a deep orange colour; and the wings off the feather of a crow's wing. The hook, No. 2.

CHAP. IV.

THE list of flies which I have given the angler, he may depend are the standard for artificial fly-fishing; but as I am willing to give him as much scope as possible, to enable him to become an adept in this pleasant and ingenious recreation, I here present him with a second list, which he must make use of as his experience in artificial fly-fishing increases: and I dare affirm, that if he makes a judicious application of this and the former list, and observes the rules laid down for the weather, proper for this sport, he will never go home with an empty pannier.

The Red Fly.

Comes on about the mindle of February, and continues till the end of March: its wings are made artificially, of a dark drake's feather; the body of the red part of squirrel's fur, with the red hackle of a cock, wrapped twice or thrice under the but of the wing; has four wings, and generally flutters upon the surface of the water, which

tempts the fishes, and makes them take it the more eager. The size of the hook, No. 6.

The Blue Dun Fly.

Comes on the beginning of March, and continues till the middle of April; its wings are made of a feather out of the starling's wing, or the blue feathers that grow under the wing of a duck widgeon; the body is made of the blue fur off a fox, or the blue part of a squirrel's fur, mixed with a little yellow mohair, and a fine blue cock's hackle wrapped over the body, in imitation of the legs: as it swims down the water, its wings stand upright on its back; its tail forked, and of the same colour of its wings. It appears on the water about ten o'clock in the forenoon, and continues till about three in the afternoon; but the principal time of the day is from twelve till two, the flies then come down in great quantities, and are always more plentiful in dark, cold, gloomy days, than in bright sun-shiny weather. *Your morning's fishing, till the flies come on, should be with the worm or minnow; the size of the hook this fly is made on, is No. 7; but if the water is very low and fine, No. 8.*

The Brown Fly, or Dun Drake.

Comes on about the middle of March, and continues till the latter end of April; its wings are made off the feather of a pheasant's wing, which is full of fine shade, and exactly resembles the wing of the fly; the body is made of the bright part of hare's fur, mixed with a little of the red part of squirrel's fur, ribbed with yellow silk, and a partridge's hackle wrapt over twice or thrice under

under the but of the wing: as it swims down the water, its wings stand upright upon its back, its tail is forked, and the colour of its wings: it comes upon the water about eleven o'clock, and continues on till two, appearing on the water in shoals, or great quantities; in dark gloomy days, at the approach of the least gleam of sun, it is amazing to see, in a moment's time, the surface of the water almost covered with ten thousands of these pretty little flying insects, and the fishes rising and sporting at them, insomuch that you would think the whole river was alive; it is a pleasing sight to the angler, and affords him great diversion; in this manner they appear on the water every successive day, till the end of their duration. The blue dun, and the brown, are both on at the same time, the blues are most plentiful in cold and dark days, and the browns in warm and gloomy days; though I have often seen blues, browns, and granams, on at the same time, when they have refused the other two sorts, and have taken the browns only: there cannot be too much said in commendation of this fly, both for its duration, and the sport it affords the angler: *The size of the hook it is made on, is* No. 6.

The Granam fly, or Green-tail.

Comes on about the beginning of April, if the weather is warm, being a very tender fly, and cannot endure the cold. When they first appear on the water, they do so in great quantities, in bright mornings: you may begin to fish with them from six o'clock in the morning till eleven; then you will find the browns came on, which you must use, as the fish will not touch the granams as long

as the browns continue; about five o'clock in the evening you may use the granams again with success, the browns having then totally disappeared for that day. The granam-fly is a four-winged fly: as it swims down the water its wings lie flat on its back, it has a small bunch of eggs, of a green colour, which gives it the name of the *Greentail-fly*; as soon as it lights on the water, it drops its eggs; it is of short duration, not lasting above a week, and then totally disappears for that year. The wings are made from a feather out of the wing of a partridge or pheasant, which is shaded like the wing of the fly; the body is made of the fur from a hare's face, or ear, and a grizzled hackle of a cock wrapt under the but of the wings. *The hook*, No. 8.

The Spider Fly.

Comes on about the twentieth of April, if the weather is warm, and continues on about a fortnight: they are bred in beds of gravel by the water side, where you may find them in bunches engendering, to prepare for their production the next year: in cold and stormy days they hide themselves in the gravel, not being able to endure cold. You may fish with it from sun rise till sun set; being a very killing fly, too much cannot be said in its praise. The wings are made from a woodcock's feather, out of the but of the wing; the body of lead-coloured silk, with a black cock's hackle wrapt twice or thrice under the wings. *This fly cannot be made too fine. The hook*, No. 8, or 9.

The

The Black Caterpillar.

Comes on about the beginning of May, and continues on about a fortnight, and is to be fished with after hot sun shiny mornings; if winds and clouds appear, they then grow weak for want of the sun, and fall upon the waters in great quantities. The wings are made from a feather out of a jay's wing, the body of an ostrich's feather, which is preferable to the plover's, and fine black cock's hackle wrapt over the body. *It is a very killing fly in small brooks. The hook,* No. 7.

The Little Iron-blue-fly.

Comes on about the seventh of May, and continues on till the middle of June. In cold stormy days they come down the waters in great quantities, but in warm days there are but few to be seen. As it swims down the water, its wings stand upright on its back; its tail is forked, and the colour of its wings: it is a neat curious fly, and cannot be made too fine, it is to be fished with from about eleven o'clock in the forenoon till three in the afternoon. When these flies are on, the fishes refuse every other sort, and take these only, every sort of fish being fond of them. The wings are made from a cormorant's feather that grows under the wing, or off the feather of a dark blue-hen. that grows on the body, under the wings; the body is made of water-rat's fur, ribbed with yellow silk, and a sooty blue hackle of a cock, wrapt over the body. *The hook,* No. 8 or 9.

The Yellow Sally Fly.

Comes on about the twentieth of May, and continues on till about the tenth or twelfth of June. It is a four winged fly; as it swims down the water its wings lie flat on its back. The wings are made with a yellow cock's hackle, and the body of marten's fur, taken from the spots under the jaws, which is a fine yellow. *It is one of those flies that prepares the fish to look for the May-fly, or Green-drake. The hook,* No. 7.

The Oak, Ash, Woodcock, Cannon, or Downhill Fly.

Comes on about the sixteenth of May, and continues on till about a week in June; it is to be found on the buts of trees, with its head always downwards, which gives it the name of the Downhill-fly. It is bred in oak-apples, and is the best of all flies for bobbing at the bush in the natural way, and a good fly for the dab-line, when made artificially. The wings are made from a feather out of the wing of a partridge or woodcock, the body with a bittern's feather, and the head with a little of the brown part of hare's fur. *The hook,* No. 7.

N. B. Some dub it with black wool and Isabella-coloured mohair, and bright brownish bear's hair, warped on with yellow silk, but the head of an ash colour; others dub it with an orange tawney and black ground; and others with blackish wool and gold twist; the wings off the brown part of a mallard's feather

The

The Shorn Fly.

Comes on about the same time as the Cannon Fly, and continues on till the latter end of July. They are generally found in mowing grass; it is of the caterpillar kind, has dusky wings of a dark brown colour, with fine clear blue wings under them, which it makes use of in its flight: it is in greatest perfection in June: and for the time that it continues on the water, is a most excellent killer in rivers or brooks. There are three sorts of them; the one I have described: there is another with a dull red wing: and a third with a dark blue wing, all of which the fish take very well, but the preference must be given to the red sort: it is to be fished with any time of the day, from sun-rise to sun-set. The wings are made of a red cock's hackle, with a black list up the middle; the body with a peacock's herl. The hook No. 6, if for a river; but if for a dead, heavy, running brook, the fly must be made larger, as on No. 4, or 5.

The Orl Fly.

Comes on the latter end of May, and continues on till the latter end of June. It is a four-winged fly, generally flutters along the surface of the water, and is what fishes are remarkably fond of; you may fish for it successfully after the May Fly is gone, from four o'clock in the morning, till about seven in the evening, at which time the sky-blue comes on, then change it for the sky-blue. The wings of the Orl Fly are made with a dark grizzle cock's hackle, and the body of peacock's herl, worked with dark red silk. The hook, No. 6.

The Sky-coloured Blue.

Comes on about the same time as the ort-fly, and continues on till the middle of July. It is a neat, curious, and beautiful fly; its wings are transparent, stand upright upon its back, and are of a fine blue colour, its body is of a pale yellow, its tail forked, and the colour of its wings; it is a fly the fishes take extremely well from seven o'clock in the evening till sun-set. The wings are made from the light blue feather of a hen; the body is made with pale yellow mohair, mixed with light blue fur, and ribbed with a fine cock's hackle, dyed yellow. *The hook*, No, 8.

The Cadis Fly.

Comes on about the tenth of June; it is a large four-winged fly, of a buff colour, and its body the same colour of its wings: it continues on the water till about the middle of July; it is bred from tke cod-bait, a curious little insect: while in the state of a grub it is greatly to be admired, the outside husk that it lives in, being curiously wrought with gravel or sand: this fly is taken best at the clearing of the water, though I think him a fly worth the least notice of any in the Catalogue, there being many sorts far preferable to it. The wings are made from a feather taken from a buff-coloured hen; the body is made of buff-coloured mohair, and the legs of a pale yellow hackle. *The hook*, No. 6.

The Blue Gnat.

Comes on the water about the same time as the spinners (vide list the 1st, under June) and continues

nues on about a fortnight: if the water is low and fine the fishes take them very well, and as long as they remain on the water. The wings of this gnat are made with a small pale blue cock's hackle, and the body with light blue fur, mixed with a little yellow mohair. *The hook,* No. 8 or 9.

The Large Red Ant Fly.

Comes on about the middle of June, if hot and sultry weather, and continues on till about the 15th or 16th of July, appearing mostly in hot, close, gloomy days: it is to be fished with from about eleven o'clock in the forenoon, till about six in the evening, then make use of the evening flies described before. The ant-flies, when in perfection, are great killers, and all sorts of fishes that rise at flies, are very fond of them; and you may take fish with them in dead heavy waters, as well as in streams. The wings of this fly are made from a feather out of a stare's wing, and the body of peacock's herl, made pretty large at the tail, and fine towards the wing, with a fine ginger-coloured cock's hackle wrapt twice or thrice under the but of the wings. *The hook,* No. 8.

The Large Black Ant Fly.

Comes on at the same time with the red, and is to be fished with at the same time, and after the same manner. The wings of this fly are made with the lightest sky-blue feather you can get, and with the greatest gloss; but it is difficult to find any that can come up to the glossiness of the natural wings, except the thistle, which makes them the best of any thing I know of, but is not lasting;

the body is made with a black ostrich's feather, and a black cock's hackle wrapt under the but of the wings: it is to be made in the same form as he red one. *The hook,* No. 8.

The Welchman's Button, or Hasle Fly.

Comes on about the latter end of July, and continues on about nine days; it is in form like a round button, from which it derives its name: it has four wings, the uppermost husky and hard, the undermost of a fine blue colour, soft, and transparent; it is to be found on hazel-trees, or fern: it is an excellent fly for bobbing at the bush. or dub line; but is rather difficult to make, on account of its shape and form: the wings are made from the red feather that grows upon the rump or tail of a partridge; the body is made with a peacock's herl, and an ostrich's feather mixed. and the legs of a fine black cock's hackle. *The hook,* No. 7.

The Little Red and Black Ant Flies.

Comes on about the tenth or twelfth of August. and are to be seen in warm gloomy days, till the latter end of September; to be fished with from about twelve o'clock, till four in the evening, and are to be made in the same form as the large ones, and with the same materials, but very small. *The hook,* No. 9.

The Little Whirling Blue.

Comes on about the tenth or twelfth of August, and continues on about three weeks: as it swims down the water, its wings stand upright on its back;

back; it has a forked tail, the colour of its wings: it is to be fished with from eleven o'clock in the forenoon, till three in the afternoon. The wings are made from a feather out of the wings of a starling; the body is made with a spaniel's fur, mixed with a little yellow, and a fine red hackle over the body. *The hook,* No. 8.

The Little Pale Blue.

Comes on about the same time as the Whirling Blue, and continues on till about the latter end of September: as it swims down the water, its wings stand upright on its back; it has a forked tail, and the colour of its wings: it is a neat, curious, little fly, and what the graylings are very fond of: it is to be fished with from about ten o'clock in the morning, till three in the afternoon, and generally affords the angler great diversion. The wings are made from a feather off the sea-swallow: the body is made of the lightest blue fur you can get, mixed with a very little yellow mohair, with a fine pale blue hackle wrapt over the body. *The hook,* No. 8.

The Willow Fly.

Comes on about the beginning of September, and continues on till the latter end of October: it is a four-winged fly, and generally flutters upon the surface of the water: it is to be fished with in cold stormy days, being then most plentiful on the water; but in warm gloomy days make use of the Pale Blue. The wings are made of a blue grizzled cock's hackle, and the body of the blue part of squirrel's fur, mixed with a little yellow mohair. *The hook,* No. 7.

The three last-mentioned flies conclude the season for fly-fishing. From the middle of May till August, you will find great variety of flies and gnats upon the water every day, so that you must observe it as a general rule to fish with the first fly that comes on in the morning; that fly being the first which is on the water in the day that is first mentioned in every month, and then you will see the other flies and gnats, coming down every day in regular succession, every succeeding day till August. The great number of flies and insects that are on the water, all the hot summer months, and the great variety of food that the fishes have, both at top and bottom, makes them very nice, and more difficult to be taken, than in the spring or in the autumn: the great number of flies and insects which are on the water all the summer months, totally disappear about the middle of August, so that your diversion is as certain with the three autumnal flies, viz. the Little Whirling Blue, the Pale Blue, and the Willow-fly, as with the three spring flies, which are the Red-fly, the Blue Dun, and the Brown. In these two seasons of the year, if the weather is favourable, and water in order, you will find your sport more certain and regular than in the hotter months. This last list of flies may be deemed the standard of artificial fly-fishing; they are the ingenious Bowlker's, of Ludlow in Shropshire. For their excellency they are not to be equalled. They will kill fish in any county of England and Wales, and are, what I call, *the angler's treasure*. Their names are universally known: as for the flies called *Lochaber's Golden Sooty's, &c. &c.* which are to be met with in a late publication, they are not sufficiently known to be of general use.

Not

Not only these flies that are most useful, in the recreation of angling, but myriads more come under the angler's observation, when in pursuit of his pastime, which will not only fill his mind with wonder and admiration, at the incomprehensible works of Nature, but likewise make him praise that Almighty Power, from whom both himself and them derive their being.

There is so beautiful a passage a-propos to this subject, in Thomson's Summer, that I think the insertion of some part of it, must prove acceptable to the informed and pious mind:

——————— Nor shall the muse disdain
To let the little lively summer-race
Live in her lay, and flutter thro' her song:
Not mean, tho' simple, to the sun ally'd,
From him they draw their animating fire.

Wak'd by his warmer ray, the reptile young
Come wing'd abroad, by the light air upborne,
Lighter and full of soul. From ev'ry chink
And secret corner, where they slept away
Their wintry storms, or rising from their tombs
To higher life, by myriads forth at once
Swarming they pour, of all the varied hues
Their beauty-beaming parent can disclose.
Ten thousand forms, ten thousand different tribes,
People the blaze. To sunny waters some
By fatal instinct fly, where on the pool
They sportive wheel; or falling down the stream,
Are snatch'd immediate by the quick-ey'd Trout
Or darting Salmon. Thro' the green-wood glade
Some love to stray, there lodg'd, amus'd, and fed,
In the fresh leaf: luxurious, others make
The meads their choice, and visit ev'ry flow'r,
And ev'ry latent herb, for the sweet task
To propagate their kinds, and where to wrap,
In what soft beds, their young, yet undisclos'd,
Employs their tender care: some to the house,
The fold, and dairy, hungry bend their flight,

Sip round the pail, or taste the curdling cheese:
Oft, inadvertent from the milky stream
They meet their fate, or welt'ring in the bowl,
With power'less wings around them wrap'd, expire.

Resounds the living surface of the ground;
Nor undelightful is the ceaseless hum
To him who muses through the woods at noon,
Or drowsy shepherd as he lies reclin'd,
With half shut eyes beneath the floating shade
Of willows grey, close crowding o'er the brook.

Gradual from these what num'rous kinds descend
Evading e'en the microscopic eye!
Full nature swarms with life, one wond'rous mass
Of animals, or atoms organiz'd,
Waiting the vital breath, when parent heav'n
Shall bid his spirit blow.

Let no presuming impious railer tax
Creative wisdom, as if aught was form'd
In vain, or not for admirable ends:
Shall little haughty ignorance pronounce
His works unwise, of which the smallest part
Exceeds the narrow vision of her mind?

CHAP. V.

THE BEST RULES FOR ARTIFICIAL FLY FISHING.

IT is the best fishing in a river somewhat disturbed with rain, or in a cloudy day, when the waters are moved with a gentle breeze: the south and west winds are the best: and if the wind blows high, yet not so but that you may conveniently guide your tackle, the fishes will rise in the still deeps; but if there is little wind stirring, the best angling is in swift streams.

In casting your line do it always before you, and in such a manner that the fly may fall first on the water, and as little of your line with it as possible, but if the wind is high, you will then be forced to drown a good part of it, that you may keep the fly on the water; and endeavour, as much as you can, to have the wind at your back, and the sun in your face; but the winding of the river will frequently render that impracticable.

When you throw your line, wave the rod in a small circumference round your head, and never make a return of it before it has had its full scope, for if you do the fly will snap off.

Although when you angle the day is cloudy and windy, and the water thick, you must keep the fly in continual motion, otherwise the fishes will discern the deceit.

" Upon the curling surface let it glide,
" With nat'ral motion from your hand supply'd,
" Against the stream now gently let it play,
" Now in the rapid eddy roll away."

Let the line be twice as long as the rod, unless the river is encumbered with wood: and always stand as far off the bank as the length of your line will permit, when you cast the fly to the contrary side; but if the wind blows so that you must throw your line on the same side you are on, stand on the very brink of the river, and cast your fly at the utmost length of the rod and line, up or down the stream as the wind serves.

You must have a quick sharp eye, and active hand, to strike directly a fish rises: or else finding the mistake he will spew out the hook.

Small light coloured flies are for clear waters and clear atmospheres, large dark coloured flies when *vice versa*.

When after rain the water becomes brownish, an orange coloured fly is taken greedily.

When fishes rise at the fly very often and yet never take it, you may conclude that it is not what they like: therefore change it for one they do.

When you see a fish rise, throw your fly beyond him, and draw it gently over the place where he rose; and if it is a proper fly for the season, and you cast it with a nicety, the fish is your own.

When you angle in slow running rivers, or still places, with an artificial fly, cast it across the water, and let it sink a little in the water, and then draw it gently over to you again, letting the current carry it slowly down: this

this is the best way for slow waters; but for quick ones your fly must always swim on the top, under the continual inspection of your eyes, which ought, for this kind of angling, to be as sharp as the *basilisk's*.

It is a good plan always to carry some dubbing, gut, hooks, and silk, out with you in a small pocket book, that you may be able always to imitate any fly you see the fish rise at more than others.

The lighter your flies fall on the water the better, this you will not accomplish by strength, but by practice, always raising your rod by degrees, after you have made your cast. A young angler should never use more than one fly on the stretcher at first, but when he can throw out pretty well, he may add to the stretcher one or more droppers, observing always to let them be one yard asunder.

I shall now conclude these rules by giving the reader a passage relating to *artificial fly-fishing*, (with the alteration only of two or three monosyllables (from the *Spring* of that elegant and natural descriptive poet, Mr. Thomson, which cannot fail of contributing as well to his amusement, as instruction.

Soon as the first foul torrent of the brooks,
Swell'd with the vernal rains, is ebb'd away,
And, whit'ning, down their mossy-tinctur'd stream
Descends the billowy foam, then is the time,
While yet the dark-brown water aids the guile,
To tempt the trout. The well-dissembl'd fly,
The rod fine tap'ring with elastic spring,
Snatch'd from the hoary steed the floating line,
And all thy slender wat'ry stores prepare;

But

But let not on thy hook the tortur'd worm,
Convulsive twist in agonizing folds,
Which, by rapacious hunger swallowed deep,
Gives, as you tear it from the bleeding breast
Of the weak helpless uncomplaining wretch,
Harsh pain and horror to the tender hand.
When with his lively ray the potent sun
Has pierc'd the streams, and rous'd the finny race,
Then, issuing cheerful to thy sport repair;
Chief should the western breezes curling play,
And light o'er ether bear the shadowy clouds.
High to their fount, this day, amid the hills
And woodlands warbling round, trace up the brooks;
Then next pursue their rocky channel'd maze
Down to the river in whose ample wave
Their little naiads love to sport at large.
Just in the dubious point, where with the pool
Is mix'd the trembling stream, or where it boils
Around the stone, or from the hollow bank
Reverted plays in undulating flow,
There throw, nice judging, the delusive fly,
And as you lead it round in artful curve,
With eye attentive mark the springing game.
Straight as above the surface of the flood
They wanton rise, or urg'd by hunger leap,
Then fix with gentle twitch the barbed hook;
Some lightly tossing to the grassy bank,
And to the shelving shore slow dragging some,
With various hand, proportion'd to their force:
If yet too young, and easily deceiv'd,
A worthles prey scarce bends your pliant rod,
Him piteous of his youth, and the short space
He has enjoy'd the vital light of heav'n,
Soft disengage, and back into the stream
The speckled captive throw; but should you lure
From the dark haunt, beneath the tangled roots
Of pendent trees, the monarch of the brook,
Behoves you then to ply your finest art.
Long time he, following cautious, scans the fly,
And oft attempts to seize it, but as oft
The dimpl'd water speaks his jealous fear:
At last, while haply o'er the shaded sun
Passes a cloud, he desperate takes the death.

With

With sullen plunge: at once he darts along,
Deep struck, and runs out all the lengthen'd line,
Then seeks the farthest ooze, the sheltering weed,
The cavern'd bank, the old secure abode;
And flies aloft, and flounces round the pool,
Indignant of the guile. With yielding hand,
That feels him still, yet to his furious course
Gives way, you, now retiring, following now
Across the stream, exhaust his idle rage,
Till floating broad upon his breathless side,
And to his fate abandon'd, to the shore
You gaily drag your unresisting prize.

CHAP. VI.

OF THE PRINCIPAL RIVERS IN ENGLAND AND PARTICULARLY THE THAMES.

THE rivers in England are said by Dr. Heylin, to be three hundred and twenty-five, though others increase their number to four hundred and fifty. It would be superfluous here to treat particularly of their diversities, their situations, their distance and remoteness from each other, their nearness or vicinity to the sea, the qualities of their water, and the various species of fish they contain. Those that have a more immediate intercourse with the sea, particularly of its influences, and have the same vicissitudes, the same fluxes and refluxes, the same salt water, and the same sort of fish which frequent those seas where they disembogue themselves

selves. The mouths of the rivers are too deep to be fathomed by the cordage of a line; but more inland, and the farther distant from the common receptacle of waters, the rivers are most proper for the angler's diversion.

The principal rivers in England are the Thames, Severn, Trent, Tine, Tweed, Medway, Tees, Dove, Isis, Tame, Willey, Avon, Lea, Trevel, Lon, Nen, Welland, Davent, Calder, Wharf, Nid, Don, Swale, Hull, Ouse, and Are. The rivers in Wales are reckoned above two hundred, the principal of which are the Dee, Wye, Conwy, Tivy, Chedlayday, Cluid, Usk, Tovy, Taff, and Dovy. Several rivers in England run under ground and then rise again, as a branch of the Medway in Kent; the Mole in Surry; Hans in Staffordshire; the little rivers Allen in Denbighshire, and Deveril in Wiltshire; the river Recall hides itself under ground, near Elmsley in the North-Riding of Yorkshire; at Ashwell in Bedfordshire, rise so many sources of springs that they soon drive a mill; at Chedder, near Axbridge in Somersetshire, is a spring that drives twelve mills in a quarter of a mile. In the midst of the river Nen, south of Peterborough in Northamptonshire, is a deep gulf, called Medeswell, so cold, that in summer no swimmer is able to endure it, yet it is not frozen in the winter. But of these enough.

As the maps will give a better prospect of these than any enumeration of them can do, let every angler have a large one of England, or at least of the particular county where he usually angles, and therein he may with delight observe the spring head, scite, distance, various passages, windings, turnings, and confluxes of each particular

ticular river, with what towns, castles, churches, gentlemen's seats, and places of note, are on or near the banks; making, as he angles, remarks proper to the nature of each. The six principal rivers are as follow:

1. The Thames, compounded of two rivers, Tame and Isis. The Tame rises in Bucks, beyond Tame in Oxfordshire, and the latter in Cotswold-hills, near Cirencester in Gloucestershire. They meet about Dorchester, in Oxfordshire, and thence run united betwixt that county and Bucks, and between Buckinghamshire, Middlesex, and Essex, on the one side, and Surry and Kent on the other, wedding itself to the Kentish Medway in the very jaws of the ocean. This river is said to feel the violence and benefit of the sea more than any other river in Europe, ebbing and flowing twice a day, more than sixty miles. Sir John Denham has given so grand a description of the Thames, in his Cooper's-hill, that I think the insertion of some part, cannot prove unacceptible to the reader:

My eye descending from the hill, surveys
Where Thames among the wanton vallies strays:
Thames; the most lov'd of all the ocean's sons
By his old Sire, to his embraces runs,
Hasting to pay his tribute to the sea,
Like mortal life to meet eternity;
Tho' with those streams he no resemblance hold,
Whose foam is amber and their gravel gold:
His genuine and less guilty wealth t' explore,
Search not his bottom, but survey his shore;
O'er which he kindly spreads his spacious wing,
And hatches plenty for the ensuing spring;
Nor then destroys it with too fond a stay,
Like mothers which their infants overlay:
Nor with a sudden and impetuous wave,
Like profuse kings, resumes the wealth he gave.

No

No unexpected inundations spoil
The mower's hopes, or mock the ploughman's toil;
But god-like his unweary'd bounty flows:
First loves to do, then loves the good he does.
Nor are his blessings to his banks confin'd,
But free and common as the sea or wind;
When he, to boast or to disperse his stores,
Full of the tribute of his grateful shores,
Visits the world, and in his flying tow'rs
Brings home to us, and makes both Indies ours,
Finds wealth where 'tis, bestows it where it wants,
Cities in deserts, woods in cities, plants.
So that to us no thing, no place, is strange,
While his fair bosom is the world's exchange.

The second river of note is the Severn, which has its beginning in Plinilimmon-hill, in Montgomeryshire, and its end seven miles from Bristol; washing in that place the walls of Shrewsbury, Worcester, Gloucester, and divers other places and palaces of note. It receives greater rivers, and is farther navigable than the Thames, but does not equal it for the quantity and quality of its fish.

3. The Trent (so called on account of the thirty different kinds of fish which are found in it, or because it receives thirty small rivers) has its fountain in Staffordshire, and gliding through the counties of Nottingham, Lincoln, Leicester, and York, augments the turbulent current of the Humber, the most violent stream of all the isle. The Humber is not a distinct river, because it has not a spring head of its own, but is rather the mouth or *æstuarium* of divers rivers meeting together: among which, besides the Trent, are the Darvent and Ouse.

4. The Medway, a Kentish river, rises near Tunbridge, passes by Maidstone, runs by Rochester.

discharges itself into the mouth of the Thames, by Sheerness: a river chiefly remarkable for the dock at Chatham, where ships of the first rate are built and repaired for the use of the English navy.

5. The Tweed, the north-east boundary of England, on whose banks is seated the strong and almost impregnable town of Berwick:

6. The Tine, famous for Newcastle and its inexhaustible coal-pits. These, and the rest of principal note, are thus described in one of Mr. Drayton's sonnets:

I.

The flood's Queen Thames, for ships and swans is crown'd,
And stately Severn for her shore is prais'd;
The Chrystal Trent for fords and fish renown'd,
And Avon's fame to Albion's cliffs is rais'd:

II.

Carlegion Chester vaunts her holy Dee:
York many wonders of her Ouse can tell:
The Peak her Dove, whose banks so fertile be,
And Kent will say, her Medway doth excel.

III.

Cotswold commands her Isis to the Tame:
Our northern borders boast of Tweed's fair flood:
Our western parts extol their Willy's fame,
And the old Lea brags of the Danish blood.

But let me return to the Thames, of which, and the rivers that fall into it, I shall treat somewhat particularly, as they are more the seat for the diversion of angling than any others. The higher an angler goes up the Thames, if within about 40 miles,

miles, the more sport, and the greater variety of fish he will meet with; but as few Londoners go so far from home, I shall mention the best places for Thames angling from London Bridge to Chelsea.

But before I proceed any farther on this subject, it will be necessary to lay down some rules which the angler must attend to.

If the air is cold and raw, the wind high, the water rough, or if the weather is wet, it is totally useless to angle in the Thames.

But when the sky is serene, the air temperate, and the water smooth, success will attend you.

The proper hours for angling, are from the time that the tide is half ebbed, to within two hours of the high water, provided the land floods do not come down.

Always pitch your boat under the wind: that is, if the wind be in south, then keep on the Surry shore: if north, on the London side.

The best places for pitching a boat to angle in the Thames, are about one hundred and fifty yards from York Stairs; the Savoy, Somerset-house, Dorset Stairs, Black-Friar's Stairs; the Dung-wharf near Water-Lane, Trig Stairs, and Essex-Stairs. On Surry side Falcon Stairs; Barge Houses; Cuper's, vulgo Cupid's Stairs; the Windmill, and Lambeth.

There are very good *roach* and *dace* to be caught at Westminster Bridge, if the weather is favourable in the Autumn; the fifth arch on the north-side is best to pitch the boat.

When you go to angle at Chelsea, on a calm fair day, the wind being in a right corner, pitch your boat almost opposite to the church, and angle in the six or seven feet water, where, as well as at Battersea Bridge, you will meet with plenty of *roach* and *dace*.

Mortlake

Mortlake Deeps is the next place where *roach* principally resort when the weeds are rotten; and here are good *carp* very often taken.

From the sides of the Aits opposite to Brentford, Isleworth, and Twickenham, there is very good angling for *roach, dace, gudgeons,* and *perch*; very often you will meet with *trout* and *carp*.

Teddington Banks are remarkable for good *gudgeons, roach, &c.*

Kingston-wick and Kingston, are famous for *barbel, roach,* and *dace*.

At Hampton and Sunbury there is good angling for *barbel, roach, dace, chub, gudgeons,* and *skeggers;* and from the Aits, for *trout* and large *perch*.

Walton Deeps and Shepperton Pool abound with large *barbel* and *dace*.

At and about Windsor is a vast variety of all sorts of fish; but if a man be found angling in another's water, (without leave) he is fined very high by the court of that town, if he only catches a single *gudgeon,* &c.

Of the rivers that empty themselves into the Thames, and of others which are not far from it, I shall begin with those on the north-side.

1. Ilford river, the upper part of which abounds with *roach, dace,* and some *perch,* but between Ilford and the Thames, especially about three miles from the town, there is *pike*.

2. Woodford river, stored with *perch, chub, roach,* and *dace*.

3. Stratford river affords the angler good diversion for *roach, dace, chub, perch,* &c.

4. Bow river, having the same fish in it as the Stratford river.

5. Hackney river, having plenty of large *barbel, chub, roach, dace, gudgeon, eels,* and *lampreys*. In

this river the *barbels, eels,* and *gudgeons,* are very fine. The river Lea runs here, and the higher you go up it the greater sport you will have: the Rye-house, near Hoddesdon, (famous for the plot) is an excellent part to go to for diversion.

The back waters near Tottenham Mills abound with fish.

6. Waltham river, besides large *barbel, chub, roach, dace, gudgeon,* and eels, has good store of fine *pike,* and some *carp.*

7. The New river, pretty well stored with *chub, roach, dace, gudgeon,* and *eels.*

8. Brentford river, a good one formerly, but now much abused by poachers; but the angler may meet with some *chub, roach, dace,* and *perch.*

9. Hounslow river, well stored with *roach, dace, perch, pike,* and *gudgeon.*

The powder mill-tail, near Hounslow, is a very good place for angling.

10. Colne river, abounding with *chub, roach, dace, perch,* and *pike.*

11. Uxbridge river, excellent for its large and fat *trouts*; but as the water is rented, not only leave must be obtained to angle in it; but you must pay so much per pound for what you kill. Denham, near Uxbridge, is a very famous place.

Having now done with the north side, I proceed to the south of the Thames.

1. Debtford river, now very much decayed, and has but a few fish in it, as *roach, dace,* and *flounders;* though by chance you may meet with a *trout.*

2. Lewisham river, in which are some good *trouts,* large *roach, chub, gudgeon, perch,* and *dace.*

3. Wandsworth river, well stored with *gudgeons,*

geons, dace, flounders, perch, pike, and some *carp,* and *trouts;* very large silver *eels* are often taken there.

4. Mitcham river; its principal fish are *trouts.*

5. Merton river, for *trouts* also.

6. Carshalton river, abounding with *trouts* and other white fishes.

7. Moulsey river, yielding *perch, jack, roach, dace, chub, gudgeons, eels, flounders, barbels,* and *trouts.*

8. Esher river, good for *jacks, perch, chub, roach, dace, gudgeons, eels, flounders, barbels,* and *trouts.*

9. Cobham river, stored with plenty of good *trouts,* fat and large, as also *dace perch, chubs, jacks* and *gudgeons.*

10. Weybridge river, affording good diversion for *carp,* some of which weigh eight or nine pounds; also *jack, roach, dace, flounders, popes,* large *bleak, barbel,* and *gudgeons.*

11. Byfleet river, wherein are very large *pikes, jacks,* and *tench; perch,* of eighteen inches long; good *carp,* large *flounders, bream, roach, dace, gudgeons, popes,* large *chub* and *eels.*

I shall conclude this account of the Thames, and the principal rivers that fall into and compose it, with the following beautiful lines of Mr. Pope:

First the fam'd authors of his ancient name,
The winding Isis, and the fruitful Thame;
The Kennet swift, for silver eels renown'd;
The Lodden slow, with verdant alders crown'd,
Cole, whose dark streams his flow'ry islands lave;
And chalky Wey, that rolls a milky wave:
The blue transparent Vandalis appears;
The gulfy Lee his sedgy tresses rears;
And sullen Mole, that hides his diving flood;
And silent Darant, stain'd with Danish blood.

CHAP. VII.

OF THE GAME LAWS RELATIVE TO ANGLING.

1st. *The Penalty of Fishing in Ponds and other private Fisheries.*

1. ANY may erect a fish-pond without licence, because it is a matter of profit, for the increase of victuals. 2. Inst. 199.

2. If any trespass in ponds be therefore attainted at the suit of the party, great and large amends shall be awarded according to the trespass; and they shall have three years imprisonment, and after shall make fine at the king's pleasure, (if they have whereof) and then shall find good surety that after they shall not commit the like trespass: and if they have not whereof to make fine, after three years imprisonment, they shall find like surety; and if they cannot find like surety, they shall abjure the realm. And if none sue within the year and day, the king shall have suit. 3. Ed. I. c. 20. Note, those are trespassers in ponds, who endeavour to take fish therein. 2. Inst. 200.

3. If any person shall unlawfully break, cut, or destroy, any head or dam of a fish-pond, or shall wrongfully fish therein, with intent to take and kill fish, he shall, on conviction, at the suit of the king, or of the party, at the assizes or sessions, be imprisoned three months, and pay treble damages; and

and after the three months expired, shall find sureties for his good abearing for seven years, or remain in prison till he doth. 5. El. c. 21. s. 2. 6.

4. Whereas divers idle, disorderly, and mean persons, betake themselves to the stealing, taking, and killing of fish, out of ponds, pools, motes, stews, and other several waters and rivers, to the great damage of the owners thereof; it is enacted, that if any person shall use any net, angle, hair, noose, troll, or spear; or shall lay any wears, pots, fish-hooks, or other engines; or shall take any fish by any means or device whatever, or be aiding thereunto, in any river, stew, pond, mote, or other water, without the consent of the lord or owner of the water; and be thereof convicted by confession, or oath of one witness, before one justice, in one month after the offence, every such offender in stealing, taking, or killing fish, shall for every such offence give to the party injured such recompence, and in such time as the justice shall appoint, not exceeding treble damages; and moreover shall pay down to the overseers for the use of the poor, such sum, not exceeding 10s. as the justice shall think meet; in default of payment, to be levied by distress; for want of distress to be committed to the house of correction, not exceeding one month, unless he enter into bond with one surety to the party injured, not exceeding 10l. never to offend in like manner, 22 and 23 C. 2. c. 25. s. 7. And the justice may take, cut, and destroy, all such angles, spears, hairs, nooses, trolls, wears, pots, fish-hooks, nets, or other engines, wherewith such offender shall be apprehended. S. 8.

Persons aggrieved may appeal to the next

sessions, whose determination shall be final, if no title to any land, royalty, or fishery, be therein concerned. S. 19.

5. Whereas divers idle, disorderly, and mean persons, have and keep nets, angles, leaps, piches, and other engines, for the taking and killing of fish out of ponds, waters, rivers, and other fisheries, to the damage of the owners thereof; therefore, no person hereafter shall have or keep any net, angle, leap, piche, or other engine for the taking of fish, other than the makers and setters thereof, and other than the owner and occupier of a river or fishery; and except fishermen and their apprentices lawfully authorized in navigable rivers. And the owner or occupier of the river or fish; and every other person by him appointed, may seize, detain, and keep to his own use, every net, angle, leap, piche, and other engine, which he shall find used or laid, or in the possession of any person fishing in any river or fishery, without the consent of the owner or occupier thereof. And also, any person, authorized by a justice's warrant, may in the day-time search the houses, outhouses, and other places, of any person hereby prohibited to have or keep the same, who shall be suspected to have or keep in his custody or possession any net, angle, leap, piche, or other engine aforesaid, and seize and keep the same to his own use, or cut and destroy the same, as things by this act prohibited to be kept by persons of their degree. 4 and 5 W. c. 23. s. 5, 6.

6. If any person shall enter into any park or paddock, fenced in and closed, or into any garden, orchard, or yard, adjoining or belonging to any

any dwelling-house in or through which park or paddock, garden, orchard, or yard, any stream of water or river shall run or be, or wherein shall be any river, stream, pool, pond, mote, stew, or other water, and by any ways, means, or device whatever, shall steal, take, kill, or destroy, any fish bred, kept, or preserved therein, without the consent of the owner thereof; or shall be aiding or assisting therein; or shall receive or buy any such fish, knowing the same to be stolen or taken as aforesaid; and shall be convicted thereof at the assizes, within six calendar months after the offence committed; he shall be transported for seven years. And any offender; surrendering himself to a justice, or being apprehended, or in custody for such offence, or on any other account, who shall make confession thereof, and a true discovery, on oath, of his accomplice, or accomplices, so as such accomplice may be apprehended, and shall on trial give evidence so as to convict such accomplice, shall be discharged of the offence so by him confessed. 5. G. 3. c. 14. s. 1, 2.

And if any person shall take, kill, or destroy, or attempt to kill, take, or destroy, any fish in any river or stream, pond, pool, or other water (not being in any park or paddock, or in any garden, orchard, or yard, adjoining or belonging to any dwelling-house, but in any other inclosed ground, being private property) he shall, on conviction before one justice, on the oath of one witness, forfeit 5l. to the owner or owners of the fishery, of such river or stream of water, or of such pond, pool, mote, or other water: and such justice, on complaint, upon oath, may issue his warrant to bring the person complained of before him; and if he shall be convicted before such justice, or any

other justice of the county or place, he shall immediately after conviction pay the said penalty of 5l. to such justice, for the use of such person as the same is hereby appointed to be paid unto; and in default thereof, shall be committed by such justice to the house of correction, for any time not exceeding six months, unless the forfeiture shall be sooner paid; or such owner of the fishery may bring an action for the penalty (within six calendar months after the offence) in any of the courts of record at Westminster. S. 3, 4.

Provided, that nothing in this act shall extend to subject any persons to the penalties thereof, who shall fish, take, or kill, and carry away, any fish in any river or stream of water, pond, pool, or other water, wherein such person shall have a just right or claim to take, kill, or carry away such fish. S. 5.

7. By the black act, if any person, being armed and disguised, shall unlawfully steal or take away any fish out of any river or pond; or (whether armed or disguised or not) shall unlawfully and maliciously break down the head or mound of any fish-pond, whereby the fish shall be lost or destroyed, or shall rescue any person in custody for such offence, or procure any other to join with him therein, he shall be guilty of felony, without benefit of clergy.

2dly. *Rules concerning the Assize, and preserving the Breed of Fish.*

1. If any person shall lay or draw any net, engine, or other device, or cause any thing to be done in the Severn, Dee, Wye, Teame, Were, Tees, Ribble, Mersey, Dun, Air, Ouze, Swaile, Calder, Wharfe,

Wharfe, Eure, Darwent, or Trent, whereby the spawn or fry of salmon, or any kepper or shedder salmon, or any salmon not 18 inches from the eye to the extent of the middle of the tail, shall be taken and killed; or shall set any bank, dam, hedge, stank, or net across the same, whereby the salmon may be taken, or hindered from passing up to spawn, or shall between July 31, and November 12, (except in the *Ribble*, where they may be taken between Jan. 1, and Sept. 15,) take any salmon of any kind in any of the said rivers, or shall, after Nov. 12, yearly, fish there for salmon, with any net less than 2½ inches in the mesh; he shall, on conviction, in one month, before one justice, on view, confession, or oath of one witness, forfeit 5l. and the fish, nets, and engines; half the said sum to the informer, and half to the poor, by distress; for want of distress, to be committed to the house of correction or goal, not more than three months, nor less than one, to be kept to hard labour, and to suffer such other corporal punishment as the justice shall think fit: the nets and engines to be cut or destroyed, in presence of the justice: the banks, dams, hedges, and stanks, to be demolished at the charge of the offender, to be levied in like manner: 1 G. st. 2. c. 18. s. 14.

Note. It is not said who shall have the fish; so that it seems they are forfeited to the king.

And no salmon out of the said rivers shall be sent to London, under six pounds weight; on pain that the sender, buyer, or seller, on the like conviction, shall forfeit 5l. and the fish; half to the informer and half to the poor, by distress; for want of sufficient distress, to be committed to the house of correction or goal, to be kept to hard labour for three months, if not paid in the mean time. Id. S. 15.

And persons aggrieved may appeal to the next Sessions. Id. S. 17.

2. No salmon shall be taken in the Humber, Ouze, Trent, Done, Aire, Darwent, Wharfe, Nid, Yore, Swale, Tees, Tine, Eden, or any other water wherein salmon are taken, between Sept. 8 and Nov. 11. Nor shall any young salmon be taken at millpools (nor in other places, 13. R. 2. st. 1. c. 19.) from Mid-April to Midsummer, on pain of having the nets and engines burnt for the first offence: for the second, imprisonment for a quarter of a year; for the third a whole year; and, as the trespass increaseth, so shall the punishment. And overseers shall be assigned to enquire thereof. 13 Ed. 1. st. 1. c. 47. That is, under the great seal, and by authority of parliament. 2. Inst. 477.

And no person shall put in the waters of Thamise, Humber, Ouze, Trent, nor any other waters, in any time of the year, any nets called stalkers, nor other nets nor engines whatsoever, by which the fry or breed of salmon, lampreys, or any other fish, may in anywise be taken or destroyed: on the like pain. 13 R. 2. st. 1. c. 19.

And the waters of Lon, Wyre, Mersee, Rybbyl, and all other waters in Lancashire, shall be put in defence as to taking of Salmon to Michaelmas to Candlemas, and in no other time of the year. And conservators shall be appointed in like manner. 13 R. 2. st. 1. c. 19.

And the justices of the peace (and the mayor, of London, on the Thames and Medway,) shall survey the offences in both the acts above-mentioned; and shall survey and search all the wears in such rivers; that they shall not be very strait for the destruction of such fry and brood, but of reasonable wideness after the old assize used or accustomed;

tomed; and they shall appoint under-conservators, who shall be sworn to make like survey, search, and punishment. And they shall enquire in session, as well by their office, as at the information of the under-conservators, of all defaults aforesaid, and shall cause them which shall be thereof indicted, to come before them; and if they hall be thereof convicted, they shall have imprisonment, and make fine at the discretion of the justices; and if the same be at the information of an under-conservator, he shall have half the fine. 17 R. 2. c. 9.

3. By the 1 Eliz. c. 17. No person, of what estate, degree, and condition soever he be, shall take and kill any young brood, spawn, or fry of fish; nor shall take or kill any salmon or trouts, not being in season, being kepper and shedder; nor any pike or pikerel, not being in length ten inches fish or more; nor any salmon, not being in length sixteen inches fish; nor any trout not being in length eight inches fish; nor any barbel not being in length twelve inches: and no person shall fish; or take fish, by any device, but only with a net or trammel, whereof the mesh shall be two inches and a half broad, (angling excepted, and except smelts, loches, minnows, bullheads, gudgeons, and eels;) on pain of forfeiting 20*s.* for every offence, and also the fish, nets, and engines.

Note. In some editions of the statutes it is 20*l.* in others 20*s.* in the records it is not distinguishable whether it is pounds or shillings. The latter seems more adequate to the offence.

And the conservators of rivers may enquire hereof by a jury; and in such case they shall have the fines.

The leet also may enquire hereof; and then the forfeiture shall go to the lord of the leet. And if the steward do not charge the jury therewith, he shall forfeit 40s. half to the king, and half to him that shall sue. And if the jury conceal the offence, he may impannel another jury to enquire of such concealment; and if it is found, the former jury shall forfeit every one 20s. to the lord of the leet.

And if the offence is not presented in the leet within a year, then it may be heard or determined at the sessions or assizes, (saving the right conservators.)

And by the 33 G. 2. 3. 27. No person shall take, or knowingly have in his possession, either in the water or on shore, or sell or expose to sale, any spawn, fry, or brood of fish, or any unsizeable fish, or fish out of season, or any smelt not five inches long: and any person may seize the same, together with baskets and package, and charge a constable, or other peace-officer, with the offender and with the goods, who shall carry them before a justice; and on conviction before such justice, the same shall be forfeited and delivered to the prosecutor; and the offender shall beside forfeit 20s. to be levied by distress, by warrant of such justice, and distributed, half to the prosecutor, and half to the poor of the parish where the offence was committed, (and any inhabitant of such parish, nevertheless may be a witness), for want of sufficient distress, to be committed to the house of correction, to be kept to hard labour for any time not exceeding three months, unless the forfeiture be sooner paid. Provided that the justice may mitigate the said penalty, so as not to remit above one half. Persons aggrieved may appeal to the next sessions;

sessions: And the form of the conviction may be this:

Be it remembered, that on this day of in the year of the reign of G. B. is convicted before me one of his majesty's justices of the peace, for the of for and I do adjudge him to pay and forfeit the sum of Given under my hand and seal the day and year abovesaid. S. 13, 15, 16, 17, 18, 19.

4. No person shall fasten any nets over rivers, to stand continually day and night, on pain of an hundred shillings to the king. 2. H. 6. c. 15.

Our plenteous streams a various race supply,
The bright-eye'd perch, with fins of Tyrian dye,
The silver eel in shining volumes roll'd,
The yellow carp, in scales be-dropp'd with gold,
Swift trouts, diversified with crimson stains,
And pikes, the tyrants of the wat'ry plains.

POPE'S WINDSOR FOREST.

CHAP. VIII.

PROGNOSTICS OF THE WEATHER, INDEPENDENT OF THE BAROMETER, EXTRACTED FROM THE BEST AUTHORITIES.

AS it is highly necessary that an angler should be able to form a judgment of the change of weather, on which his sport entirely depends; if he

he observes the following signs, it will soon become familiar to him.

Signs from Vapours.

If a white mist in an evening or night is spread over a meadow, wherein there is a river, it will be drawn up by the next morning's sun, and the day will be bright afterwards.

Where there are high hills, and the mist which hangs over the lower lands draw towards the hills in a morning, and rolls up their sides till it covers the top, there will be no rain.

In some places, if the mist hangs upon the hills, and drags along the woods, instead of overspreading the level grounds, in a morning, it will turn to rain; therefore, to judge rightly of the appearances of a fog, it is in some degree necessary to be acquainted with the nature of the country.

Signs from the Clouds.

It is a very considerable symptom of fair weather, when the clouds decay, and dissolve themselves into air; but it is otherwise when they are collected out of it.

In nubem cogiter aer. VIRGIL.

Against heavy rain, every cloud rises bigger than the former, and all the clouds are in a growing state.

This is most remarkable on the approach of a thunder storm, after the vapours have been copiously elevated, suspended in the sky by the heat, and are highly charged with electrical fire; small fragments of flying clouds increase and assemble together,

together, till in a short space of time they cover the sky.

When the clouds are formed like fleeces, deep, and dense towards the middle, and very white at the edges, with the sky very bright and blue about them, they are of a frosty coldness, and will soon fall either in hail, snow, or in hasty showers of rain.

If clouds are seen to breed high in the air, in thin white trains, like locks of wool, or the tails of horses, they shew that the vapour, as it is collected, is irregularly spread and scattered by contrary winds above; the consequence of which will soon be a wind below, and probably a rain with it.

If the clouds, as they come forward, seem to diverge from a point in the horizon, a wind may be expected from that quarter or the opposite.

When a general cloudiness covers the sky above, and there are small black fragments of clouds, like smoke, flying underneath, which some call messengers, and others Noah's Ark, because they sail over the other clouds, like the ark upon the waters, rain is not far off, and it will probably be lasting.

There is no surer sign of rain than two different currents of clouds, especially if the undermost flies fast before the wind; and if two such currents appear in the hot weather of the summer, they shew that a thunder storm is gathering: but the preparation which precedes a storm of thunder, is so generally understood, that it is needless to insist upon it minutely.

Signs from the Dew.

If the dew lies plentifully upon the grass after a fair day, another fair day may be expected to succeed

succeed it; but if after such a day there is no dew upon the ground, and no wind stirring, it is a sign that the vapours go upwards, and that there will be an accumulation above, which must terminate in rain.

Signs from the Face of the Sky.

If those vapours which the heat of the day raises from the earth, are precipitated by the cold air of the night, then the sky is clear in the morning; but if this does not happen, and they remain still in the air, the light of the morning will be coloured as it was in the evening, and rain will be the consequence.

There is commonly either a strong dew, or a mist over the ground, between a red evening and a grey morning; but if a red morning succeeds, there is no dew.

It is a bad sympton when a lowering redness is spread too far upwards from the horizon, either in the morning or in the evening; it is succeeded either by rain or wind, and frequently both.

When such a fiery redness, together with a raggedness of the clouds, extends towards the zenith in an evening, the wind will be high from the west or south-west, attended with rain, sometimes with a flood: before the late dreadful hurricane of 1780, at Barbadoes and the other West-India Islands, a redness like fire was observed all over the sky. When the sky, in a rainy season, is tinged with a sea-green colour, near the horizon, when it ought to be blue, the rain will continue and increase; if it is of a deep dead blue, it is abundantly loaded with vapours, and the weather will be showery.

Signs

Signs from the Sun, Moon, and Stars.

When there is a haziness aloft in the air, so that the sun's light fades by degrees, and his orb looks whitish and ill-defined, it is one of the most certain signs of rain.

If the moon and stars grow dim in the night, with the like haziness in the air, and a ring or hole appears round the moon, rain will be the consequence.

If the rays of the sun, breaking through the clouds, are visible in the air, and appear like those horns of irradiation which painters usually place upon the head of Moses, the air is sensibly filled with vapours, which reflect the rays to the sight, and these vapours will soon produce rain.

If the sun appears white at his setting, or shorn of his rays, or goes down into a bank of clouds, which lie in the horizon; all these are signs of approaching or continuing bad weather.

If the moon looks pale and dim, we are to expect rain; if red, it is a sign of wind; and if white, and of her natural colour, and the sky clear, it will be fair weather, according to a poetical adage.

If a new moon happens at twelve at night, rain is lately observed to follow.

Pallida Luna pluit, rubicunda flat, alba serenat.

If the moon is rainy throughout her course, it will clear up at the ensuing change, and the rain will probably commence again in a few days after, and continue; if, on the contrary, the moon has been fair throughout, and it rains at the change, the fair feather will probably be restored about the fourth or fifth day of the moon, and continue as before.

Sin

Sin ortu quarto (namque is cetissimus auctor)
Pura, neque obtusis per cœlum cornibus ibit,
Totus et ille dies, et qui nascentur ab illo
Exactum ad mensem, pluviam ventisque carebunt.
VIRG. GEORG. 132.

But four nights old, (for that's the surest sign,)
With sharpen'd horns, if glorious then she shine:
Next day, not only that, but all the moon,
'Till her revolving race be wholly run,
Are void of tempests.
DRYDEN.

N. B. A gentleman who cuts hay for his own consumption, will seldom fail to find his account in marking this observation; but a farmer who has much business to do, cannot contract his work into so small compass, as to save himself by the benefit of this observation, because some of his work must be done to make way for the rest.

Signs from the Winds.

When the wind veers about, uncertainly, to several points of the compass, rain is pretty sure to follow.

Some have remarked, that if the wind, as it veers about, follows the course of the sun, from the east towards the west, it brings fair weather; if the contrary, foul; but there is no prognostic of rain more infallible, than a whistling or howling noise of the wind.

From nocturnal Meteors.

When an Aurora borealis appears, after some warm days, it is generally succeeded by a coldness of

of the air; as if the matter of heat was carried upwards from the earth to the sky.

Signs of the Change of Weather from the Animal Creation.

So long as the swallows fly aloft after their prey, we think ourselves sure of a serene sky; but when they skim along near the ground, or the surface of the water, we judge the rain is not far off, and the observation will seldom fail: in the year 1775, a draught of three months continuance broke up at the summer solstice: the day before the rain came upon us, the swallows flew very near the ground, which they had never done in the fine weather.

In the mountainous country of Derbyshire, which goes by the name of the Peak, the inhabitants observe, that if the sheep wind up the hills in the morning to their pasture, and feed near the tops, the weather, though cloudy and drizzling, which is very frequently the case in those parts, will clear away by degrees, and terminate in a fine day; but if they feed in the bottoms, the rains will continue and increase.

Dogs grow sleepy and stupid before rain, and shew that their stomachs are out of order, by refusing their food, and eating grass, that sort which is hence called *dog's grass:* this they cast up again soon afterwards, and with it the foulness that offended their stomachs. Water-fowl dive and wash themselves more than ordinary; and even the fish in rivers are affected, because all anglers agree, that they never bite freely when rain is depending, Vide part 1st, rule 16th. Flies, on the contrary, are particularly troublesome, and seem to be more hungry than usual; and toads are seen in the evening,

ing, crawling across the road or beaten path, where they seldom appear but when they are restless with an approaching change.

Before any considerable quantity of rain is to fall, most living creatures are affected in such sort, as to render them some way sensible of its approach, and of the access of something new to the surface of the earth, and of the atmosphere. Moles work harder than ordinary, they throw up more earth, and sometimes come forth: the worms do so too; ants are observed to stir about, and bustle more than usually for some time, and then retire to their burrows before the rain falls. All sorts of insects and flies are more stirring and busy than ordinary. Bees are ever on this occasion in fullest employ; but betake themselves all to their hives, if not too far for them to reach before the storm arises. The common flesh-flies are more bold and greedy: snails, frogs, and toads, appear disturbed and uneasy. Fishes are sullen, and made qualmish by the water, now more turbid than before. Birds of all sorts are in action: crows are more earnest after their prey, as are also swallows and other small birds, and therefore they fall lower, and fly nearer to the earth in search of insects and other such things as they feed upon. When the mountains of the north begin to be capped with fogs, the moor-cocks and other birds quit them, fly off in flocks, and betake themselves to the lower lands for the time. Swine discover great uneasiness; as do likewise sheep, cows, and oxen, appearing more solicitous and eager in pasture than usual. Even mankind themselves are not exempt from some sense of a change in their bodies.

Prognostics continued.

1°. "A dark, thick sky, lasting for some time without either sun or rain, always become first fair, then foul, i.e." Changes to a fair, clear sky, before it turns to rain. This the Rev. Mr. Clarke, who kept a register of the weather for thirty years, since put into Mr. Derham's hands, by his grandson, the learned Dr. Samuel Clarke: this, he says, he scarce ever knew to fail; at least when the wind was in any of the easterly points: but Mr. Derham has observed the rule to hold good, be the wind where it will. And the cause is obvious: the atmosphere is replete with vapours, which, though sufficient to reflect and intercept the sun's rays from us, yet want density to descend; and while the vapours continue in the same state, the weather will do so to.

Accordingly, such weather is generally attended with moderate warmth, and with little or no wind to disturb the vapours, and an heavy atmosphere to sustain them, the barometer being commonly high. But when the cold approaches, and by condensing, drives the vapours into clouds or drops, then way is made for the sun-beams; till the same vapours being, by further condensation, formed into rain, fall down into drops.

2°. "A change in the warmth of the weather, is generally followed by a change in the wind." Thus, the northerly and southerly winds, commonly esteemed the causes of cold and warm weather, are really the effects of the cold or warmth of the atmosphere: of which Mr. Derham assures us he has had so many confirmations, that he makes no doubt of

of it. Thus it is common to see a warm southerly wind suddenly changed to the north, by a fall of snow or hail; or to see the wind, in a cold frosty morning, north, when the sun has well warmed the earth and air, wheel towards the south; and again turn northerly or easterly in a cold evening.

3°. "Most vegetables expand their flowers and down in sun-shiny weather, and towards the evening; and against rain close them again;" especially at the beginning of their flowering, when their seeds are tender and sensible. This is visible enough in the down of dandelion, and other downs: and eminently in the flowers of pimpernel; the opening and shutting of which, Gerard observes, are the countryman's weather-wiser, whereby he tells the weather of the following day. The rule is, if the flowers are close shut up, it betokens rain and foul weather: if they are spread abroad, fair weather. Ger. Herb. Lib. 2.

Est et alia (arbor in Tylis) *similis, foliosior tamen, roseique floris; quem noctu comprimens aperire incipit solis exhortu, meridie expandit. Incolæ dormire eum dicunt.* Plin.Nat.Hist.Lib.12.c.2.

The stalk of trefoil, my Lord Bacon observes, swells against rain, and grows more upright: and the like may be observed, though not so sensibly, in the stalks of most other plants. He adds, that in the stubble-fields there is found a small red flower, called by the country people *wincopipe;* which, opening in the morning, is a sure indication of a fine day.

That vegetables should be affected by the same causes that affect the weather, is very conceivable; if we consider them as so many hydrometers and thermometers, consisting of an infinite number of tracheæ

tracheæ or air vessels; by which they have an immediate communication with the air, and partake of its moisture and heat, &c. These tracheæ are very visible in the leaf of the scabiose, vine, &c.

Hence it is, that all wood, even the hardest and most solid, swells in moist weather; the vapours easily insinuating themselves into the pores thereof, especially of that which is lightest and driest. And hence we derive a very extraordinary use of wood, viz. for breaking rocks and mill-stones. The method at the quarries is this: Having cut a rock into a cylinder, they divide that into several lesser cylinders, by making holes at the proper distances round the great one: these holes they fill with so many pieces of sallow wood, dried in an oven; which, in moist weather, becoming impregnated with the humid corpuscles of the air, swell; and, like wedges, break or cleave the rocks into several stones.

The speedy drying of the surface of the earth, is a sign of a northerly wind and fair weather; and its becoming moist, of southerly wind and rain. Hence the farmer may be instructed, never to trust a sun-shiny day, while the surface of the earth continues wet; and to rely on a change to dry weather, as soon as he observes the moisture dried up, even though the appearance of the clouds should not be favourable; for the air sucks up all the moisture on the surface of the earth, even though the sky be overcast, and that is a sure sign of fair weather; but if the earth continues moist, and water stands in shallow places, no trust should be put in the clearest sky, for in this case it is deceitful.

ADDENDA

ADDENDA.

MORE SIGNS FROM ANIMALS.

AGAINST rain *fleas* bite more than common, *spiders* crawl abroad, *bees* stir not far from their hives. On the contrary, *spiders' webs* in the air, or on the grass or trees, foretel very fair and hot weather; so do *bees* when they fly far from their hives, and come late home; and likewise a more than usual appearance of *glow-worms* by night. If *gnats* play up and down in the open air near sun-set, they presage heat, if in the shade, warm and mild showers; but if they join in stinging those that pass by them, cold weather and much rain may be expected. *Larks* rising very high, and continuing to sing for a long time, and *kites* flying aloft, are signs of fair and dry weather. In men, frequently aches, wounds, and corns, are more troublesome, either towards rain or towards frost.

Virgil's beautiful description of this sense in animals, is thus rendered by Mr. DRYDEN:

Wet weather seldom hurts the most unwise;
So plain the signs, such profits are the skies:
The wary *crane* foresees it first, and sails
Above the storm, and leaves the hollow vales:
The *cow* looks up, and from afar can find
The change of heav'n, and snuffs it in the wind.
The *swallow* skims the river's watry face,
The *frogs* renew the croaks of their loquacious race.
The careful *ant* her secret cell forsakes,
And draws her eggs along the narrow tracks.

Huge

Huge flocks of rising rooks forsake their food,
And, crying, seek the shelter of the wood,
Besides, the several sorts of wat'ry fowls,
That swim the seas or haunt the standing pools,
Then lave their backs with sprinkling dews in vain,
And stem the stream to meet the promis'd rain.
Then, after showers, 'tis easy to descry,
Returning suns, and a serener sky.
* * * * * *
Their litter is not toss'd by sows unclean,
* * * * * *
And owls, that mark the setting-sun, declare
A star-light ev'ning, and a morning fair.
* * * * * *
Then thrice the ravens rend the liquid air,
And croaking notes proclaim the *settled fair*:
Then round their airy palaces they fly
To greet the sun, and seiz'd with secret joy
When storms are overblown, with food repair
To their forsaken nests and callow care.

The crow has been particularly remarked by the ancients to presage rain, when she caws, and walks alone on the sea-shore, or on the banks of rivers and pools. Thus Virgil, in the first Georgic.

Tum cornix raucâ pluviam vocat improba voce,
Et Sola in siccâ secum spatiatur arenâ.

The crow with clamorous cries the shower demands,
And single stalks along the desert sands.

DRYDEN.

Pliny makes the same observation, in the 35th chap of his 18th book: Et cum terrestes volucres contra aquas clangores fundentes sese sed maximè cornix: "It is a sign of rain, when land-fowl, and

'especially crows, are clamorous near waters, and 'wash themselves.'

Horace also expresses himself to the same purpose, in the 17th Ode of the third book, where he says,

——— Aquæ nisi fallit augur,
Annosa cornix.

——— "unles in vain
Croaks the old crow presaging rain."

Likewise in the 27th Ode of the same book, he calls the crow, *divinam imbrium imminentium*; prophetic of impending showers.

More Prognostics of the Weather, taken from the Sun, Moon, and Stars.

1st Rule. If the sun rise red and fiery, *wind* and *rain*.

2d Rule. If cloudy, and the clouds soon decrease, *certain fair weather*.

These rules may be extended to all the heavenly bodies, for as their rays pass through the atmosphere, the vapours in the air have the same effect on each.

When the farmer therefore sees the sun or moon rise or set red and fiery, or sees the clouds and horizon of that colour, he may expect wind and rain, owing to the unequal distribution of the vapours, or to their being already collected into watery globules by some preceding cause.

But if, according to the second rule, the sun rises cloudy, and the clouds soon decrease, the vapours are more equally distributed in the atmosphere;

nospere; which equal distribution is also promoted by the warmth of the rising sun. Hence we may account for an observation adopted into all languages.

The evening *red*, the morning *grey*,
Are sure signs of a *fair* day.

For if the abundance of vapours denoted by the red evening sky falls down in dew, or is otherwise so equally dispersed in the air, that the morning shall appear grey, we way promise ourselves a fair day, from that equal state of the atmosphere.

If in the morning some parts of the sky appear green between the clouds, while the sky is blue above, stormy weather is at hand.

The great Lord Bacon gives us the following rules to judge of the ensuing weather, from the first appearance of the moon: and it is said that these rules of his have never been known to fail.

If the new moon does not appear till the fourth day, it prognosticates a troubled air for the whole month.

If the moon, either at her first appearance, or within a few days after, has her lower horn obscured or dusky, or any ways sullied, it denotes foul weather before the full; but if she be discoloured in the middle, storms are to be expected about the full; or about the wane, if her upper horn is affected in like manner.

When the moon, on her four h day, appears fine and spotless, her horns unblunted, and neither flat nor quite erect, but betwixt both, it

promises fair weather for the greatest part of the month.

An erect moon is generally threatening and unfavourable, but particularly denotes wind; though if she appear with short and blunted horns, rain is rather expected.

Most of the foregoing rules are taken from the following beautiful passage of VIRGIL.

Observe the daily circle of the sun,
And the short year of each revolving moon:
By them thou shalt foresee the following day;
Nor shalt a starry night thy hopes betray.
When first the moon appears, if then she shrouds
Her silver crescent, tipp'd with sable clouds:
Concludes she bodes a tempest on the main,
And brews for fields impetuous floods of rain.
Or if her face with fiery flushings glow,
Expect the rattling winds aloft to blow.
But *four* nights old (for that's the surest sign)
With sharpen'd horns, if glorious then she shine,
Next day, not only that but all the moon,
'Till her revolving race be wholly run,
Are void of tempests both by sea and land.
* * * * * * *
Above the rest, the sun, who never lies,
Foretels the change of weather in the skies;
For if he rise unwilling to his race,
Clouds on his brow, and spots upon his face;
Or if thro' mists he shoots his sullen beams,
Frugal of light, in loose and straggling streams;
Suspect a drizzling day with southern rain.
* * * * * * *
Or if Aurora, with half open'd eyes,
And a pale sickly cheek, salute the skies;
How shall the vine, her tender leaves defend
Her teeming clusters when the storms descend?
* * * * * * *
But more than all the setting-sun survey,
When down the steep of heav'n he drives the day:
For oft' we find him finishing his race,
With various colours erring on his face;

In

In fiery red his glowing globe descends,
High winds and furious tempests he portends;
But if his cheeks are swoln with livid blue,
He bodes wet weather by his wat'ry hue;
If dusky spots are varied on his brow,
And streaked with red, a troubled colour shew,
That sullen mixture shall at once declare
Winds, rain, and storms, and elemental war.
* * * * * * *
But if with purple rays he brings the light,
And a pure heav'n resigns to quiet night;
No rising winds, or falling storms are nigh.

More Prognostics taken from the Clouds.

3d Rule. Clouds large, like rocks, great showers.

4th Rule. If small clouds increase, much rain.

5th Rule. If large clouds decrease, fair weather.

6th Rule. In summer or harvest, when the wind has been south two or three days, and it grows very hot, and you see clouds rise with great white tops, like towers, as if one were on the top of another, and joined together with black on the nether side, there will be thunder and rain suddenly.

7th Rule. If two such clouds rise, one on either hand, it is time to make haste to shelter.

Mr. Worlidge gives us the following rules:

"In a fair day, if the sky seems to be dappled with white clouds, (which is usually termed a mackarel sky) it generally predicts rain."

This is confirmed by a very ingenious gentleman, who has constantly observed, that "in dry weather, so soon as clouds appear at a great

height striped like the feathers in the breast of a hawk, rain may be expected in a day or so."

"In a clear evening, certain small black clouds appearing, are undoubted signs of *rain* to follow: or, if black or blue clouds appear near the sun, at any time of the day, or near the moon by night, rain usually follows."

"If small waterish clouds appear on the tops of hills, rain follows."

"If clouds grow, or appear suddenly, the air otherwise free from clouds, it denotes tempests at hand, especially if they appear to the south or west."

If many clouds, like fleeces of wool, are scattered from the east, they foretel rain within three days.

When clouds settle upon the tops of mountains, they indicate hard weather.

When the tops of mountains are clear, it is a sign of fair weather.

More Prognostics taken from Mist.

8th Rule. If mists rise in low grounds and soon vanish, fair weather.

9th Rule. If it rises up to the hill tops, rain in a day or two.

10th Rule. A general mist before the sun rises, near the full moon, fair weather.

More Prognostics taken from Rain.

11th Rule. Sudden rains never last long: but when the air grows thick by degrees, and the sun, moon, and stars, shine dimmer and dimmer, it is likely to rain six hours usually.

12th Rule. If it begins to rain from the south, with a high wind, for two or three hours, and the wind

wind falls, but the rain continues, it is likely to rain twelve hours or more; and does usually rain till a strong north wind clears the air: these long rains seldom hold above twelve hours, or happen above once a-year. "In an inland country," says Mr. Mills, "it may not rain for more than twelve hours successively;" but I doubt this will not hold as a general rule, either of its duration or frequentcy, in all places; for, near the sea, rains happen often which last a whole day.

13th Rule. If it begins to rain an hour or two before sun-rising, it is likely to be fair before noon, and to continue so that day: but if the rain begins an hour or two after sun-rising, it is likely to rain all that day, except the rainbow be seen before it rains.

Mr. Worlidge's signs of rain are the following:

"The audibility of sound are certain prognostics of the temper of the air in a still evening: for if the air is replete with moisture over us, it depresses sounds, so that they become audible to a greater distance than when the air is free from such moisture and vapours. From whence you may conclude, that in such nights or other times, when you hear the sound of bells, noise of water, beasts, birds, or any other sounds or noises, more plainly than at other times, the air is inclinable to rain, which commonly succeeds."

"If the earth, or any moist or fenny places, yield any extraordinary scents, or smells, it presages rain."

"If dews lie long in the morning on the grass, &c. it signifies fair weather: but if they rise or vanish suddenly and early in the morning, it presages rain."

"There is a small bird, of the size and nearly the shape of a marten, that at certain times flies very near the water, which is a most sure prognostic of tempestuous weather; never appearing but against such weather, as hath been constantly observed by the boatmen on the Severn and the channel, between the isle of Wight and the main land."

"Du anckisd geese picking their wings, washing themselves much, or cackling much, denotes rain."

"If after rain comes a cold wind, there will be more rain."

The nightly virgin, whilst her wheel she plies,
Foresees the storm impending in the skies,
When sparkling lamps their sputt'ring light advance,
And in their sockets oily bubbles dance.

DRYDEN'S VIRGIL.

More Prognostics from the Wind.

14th Rule. When the wind turns to north-east, and it continues there two days without rain, and does not turn south the third day, nor rain the third day, it is likely to continue north-east for eight or nine days all fair, and then to come south again.

15th Rule. If it turn again out of the south to the north-east with rain, and continues in the north-east two days without rain, and neither turns south, nor rains the third day, it is likely to continue north-east two or three months.

The wind will finish these turns in three weeks.

16th Rule. After a northerly wind, for the most part of two months or more, and then coming south, there are usually three or four fair days at first, and then

then on the fourth or fifth day comes rain, or else the wind turns north again and continues dry.

17th Rule. If it returns to the south within a day or two, without rain, and turns northward with rain, and returns to the south in one or two days, as before, two or three times together after this sort, then it is likely to be in the south or south-west two or three months together, as it was in the north before.

The winds will finish these turns in a fortnight.

18th Rule. Fair weather for a week, with a southerly wind, is likely to produce a great drought, if there has been much rain out of the south before. The wind usually turns from the north to south with a quiet wind without rain; but returns to the north with a strong wind and rain. The strongest winds are when it turns from south to north by west.

19th Rule. If you see a cloud rise against the wind, or side wind, when that cloud comes up to you, the wind will blow the same way the cloud came. The same rule holds of a clear place, when all the sky is equally thick, except one clear edge.

When the north wind first clears the air, which is usually once a week, be sure of a fair day or two.

The following are the observations of Lord Bacon:

When the wind changes conformable to the motion of the sun, that is, from east to south, from south to west, &c. it seldom goes back, or if it does, it is only for a short time; but if it moves n a contrary direction, viz. from east to north, from north to west, it generally returns to the former point, at least before it has gone quite through the circle.

When winds continue to vary for a few hours, as if it were to try in what point they should settle, and afterwards begin to blow constant, they continue for many days.

If the south wind begins for two or three days, the north wind will blow suddenly after it but if the north wind blows for the same number of days, the south will not rise till after the east has blown some time.

Whatever wind begins to blow in the morning, usually continues longer than that which rises in the evening.

Mr. Worlidge observes, "that if the wind be east, or north-east in the fore part of the summer, the weather is likely to continue dry: and if westward toward the end of the summer, then will it also continue dry: if in great rains the winds rise or fall, it signifies the rain will forthwith cease."

"If the colours of the rainbow tend more to red than any other colour, wind follows; if green or blue are predominant, rain."

The signs of a Tempest are these:

For ere the rising winds begin to roar,
The working sea advances to the shore;
Soft whispers run along the leafy woods,
And mountains whistle to the murm'ring floods;
And chaff with eddying winds is toss'd around,
And dancing leaves are lifted from the ground,
And floating feathers on the water play.

DRYDEN'S VIRGIL.

Prognostics continued.

20th Rule. If the last eighteen days of February, and the first ten days of March*, are for the most

* Old Style.

part

part rainy, then the spring and summer quarters will be so too: and I never knew a great drought but it entered in at that season.

21st Rule. If the latter end of October and beginning of November are for the most part warm and rainy, then January and February are likely to be frosty and cold, except after a very dry summer.

22d Rule. If there is frost and snow in October and November, then January and February are likely to be open and mild.

Mr. Claridge gives us the following observations made by our forefathers:

Janiveer freeze the pot by the fire.
If the grass grow in Janiveer,
It grows the worse for't all the year.
The Welchman had rather see his dam on the bier.
Than see a fair Februeer.
March wind and May sun
Makes clothes white and maids dun.
When April blows his horn,
'Tis good both for hay and corn.
An April flood
Carries away the frog and her brood.
A cold May and windy
Makes a full barn and a findy.
A May flood never did good.
A swarm of bees in May
Is worth a load of hay.
But a swarm in July
Is not worth a fly.

The following Rules are laid down by Lord Bacon:

If the wainscot or walls that used to sweat, be drier than usual, in the beginning of winter or

the eves of houses drop more slowly than ordinary, it portends a hard and frosty winter; for it shews an inclination in the air to dry weather, which, in winter, is always joined with frost.

Generally, a moist and cold summer portends a hard winter.

A hot and dry summer and autumn, especially if the heat and drought extend far into September, portend an open beginning of winter, and cold to succeed towards the latter part, and beginning of spring.

A warm and open winter portends a hot and dry summer, for the vapours disperse into the winter showers; whereas cold and frost keep them in, and convey them to the late spring and following summer.

Birds that change countries at certain seasons, if they come early, shew the temper of the weather, according to the country whence they came; as, in the winter woodcocks, snipes, fieldfares, &c. if they come early, shew a cold winter; and the cuckoos, if they come early, shew a hot summer to follow.

A serene autumn denotes a windy winter; a windy winter, a rainy spring; a rainy spring, a serene summer; a serene summer, a windy autumn; so that the air, on a balance, is seldom debtor to itself; nor do the seasons succeed each other in the same tenor for two years together.

Mr. Worlidge remarks, that if at the beginning of the winter the south-wind blow, and then the north, it is likely to be a cold winter; but if the north-wind first blow, and then the south, it will be a warm and mild winter.

When there are but few nuts, cold and wet harvest generally follow; but when there is a great

shew of them, hot, heavy, and dry harvests succeed.

If the oak bears much mast, it foreshews a long and hard winter. The same has been observed of hips and haws.

If broom is full of flowers, it usually signifies plenty.

Mark well the flow'ring almonds in the wood;
If od'rous blooms the bearing branches load,
The glebe will answer to the Sylvan reign,
Great heats will follow, and large crops of grain.
But if a wood of leaves o'ershade the tree,
Such and so barren will the harvest be.
In vain the hind shall vex the threshing floor,
For empty chaff and straw will be thy store.

DRYDEN'S VIRGIL.

Having at last once more revised this treatise, which through the uncertainty of life, I am not likely to do again; I take my leave of the reader, wishing him health, prosperity and good sport.—I shall now, (following the example of my pious predecessor WALTON) address THAT POWER, who penetrates and sustains all nature, who brings round the grateful vicissitude of the seasons, who has given us the inhabitants of the watery Element not only for our nourishment, but recreation, and Whom we are sure to please, by receiving his blessings thankfully, and enjoying them with propriety.

Hymn.

Father of all!—all good!—all wise!—
Who bid'st the tempest rage or cease:
Whose glory fills earth, seas, and skies,
Thou only source of joy and peace;

Thy

Thy wise decrees are right and just,
Let no one, impious! tax thy will;
But on thy glorious mercies trust,
And see a good, thro' ev'ry ill:

Arm—arm, with fortitude my breast,
The various ills of life to bear;
And teach thy servant when at rest,
For storms and troubles to prepare:

But thro' whate'er distressful scene,
Thy righteous hand may lead me still;
Resign'd to what may evil seem,
Content my breast shall calmly fill:

And as the seasons onward roll,
And years revolving quickly fly;
Sweet gratitude shall warm my soul,
For all the blessings I enjoy:

Still—still I'll praise that heav'nly source,
For what it pleases to bestow;
That petrifies the streamlet's course,
Or bids its silver current flow;

That regulates creation's laws,
Bids all in harmony unite;
And is,—*The universal cause*,
Of ev'ry thing that's good and right.

Terms used by Anglers explained.

Bawk, a knot in a hair or link.
Bed, hairs bed well when they twist kindly.
Bedding, the body of an artificial fly.
Break, a knot in the joint of a rod.
Chine a salmon, cut him up.
Cock, a float cocks when it swims perpendicular in the water.
Drag, an instrument to disentangle the line.

Fin

Fin a chub, cut him up.
Frush a chub, dress him.
Gildard, the link of a line.
Gobbet a trout, cut him up.
Grabble, fishing on the grabble is when the line is sunk with a running plummet fast to the bottom, so that the hook-link plays in the water.
Hang a fish, hook him.
Kink, a line kinks in trowling, when it is twisted between the top of the rod and the ring.
Leash of fish, three.
Pouch, a pike pouches when he swallows the bait.
Prime, fish are said to prime when they leap out of the water.
Shoal, any great number of fish together.
Solay a bream, cut him up.
Splate a pike, cut him up.
Thrash, any thing which swims down the water
Trouncheon an eel, cut him up.
Tusk a barbel, cut him up.
Veer your line, let it off the reel after striking.

ADDENDA.

MINNOW-fishing comes in about the middle of March, and continues till the latter end of August; it is a most excellent bait, very destructive, of strong exercise, being always in motion, and affords the angler variety of sport. To be angled with at any time of the day, from sunrise till sun-set, and takes the best and largest fish.

Cod-bait

Cod-bait-fishing comes in about a fortnight in May, and continues till about the middle of June: it is a very killing-bait, and will take almost every sort of fish, in deep standing waters as well as in streams, mornings and evenings, till the middle of June.

Maggot, or Gentle-fishing comes in about the beginning of May, and continues till the latter end of February, in the next year; it is the best and most killing ground-bait that was ever made use of; it will take every sort of fish that swims in fresh water, except salmon or pike.

Grass-hopper-fishing comes in about the latter end of June, and continues till the latter end of August. It is a curious fine-bait, very natural to fish, but very tender; to be drawn upon a leaded hook, No. 2, after the same manner as the cod-bait, and will take almost all sorts of fish, as pike, trout, greyling, perch, chub, roach, dace, &c. &c.

Cabbage-worm-fishing comes in about the middle of June, and continues in their successive flights, till the latter end of October. There are three sorts which the fish are remarkably fond of, and are equal in goodness to the cod-bait and grass-hopper, and will take the same sorts of fish.

Worm, or Bottom-fishing, comes in about the middle of February, if the weather is mild, and continues good all the year; you may fish with a worm all, or any time of the day, if the water is discoloured by rain; but if low, clear, and fine, only mornings and evenings; it is the most general bait we have, and will take every kind of fish; the proper worms for angling are fully described in this treatise.

A Table

A Table of the Sun's Rising every Third Day in the Year.

	2.	5.	8.	11.	14.	17.	20.	23.	26.	29.
January -	8. 09	8. 07	8. 04	8. 01	7. 58	7. 54	7. 50	7. 45	7. 40	7. 35
February -	7. 30	7. 24	7. 18	7. 12	7. 07	7. 01	6. 55	6. 50	6. 44	6. 39
March - -	6. 36	6. 30	6. 24	6. 11	6. 12	6. 06	6. 00	5. 54	5. 48	5. 42
April - -	5. 34	5. 28	5. 23	5. 17	5. 11	5. 05	5. 00	4. 54	4. 49	4. 44
May - -	4. 38	4. 33	4. 28	4. 23	4. 19	4. 15	4. 10	4. 07	4. 08	4. 01
June - -	3. 56	3. 54	3. 52	3. 50	3. 49	3. 48	3. 47	3. 48	3. 48	3. 49
July - -	3. 51	3. 52	3. 54	3. 57	4. 00	4. 03	4. 06	4. 10	4. 15	4. 19
August - -	4. 25	4. 30	4. 35	4. 40	4. 45	5. 50	4. 56	5. 01	5. 07	5. 32
September -	5. 20	5. 26	5. 32	5. 38	5. 41	5. 49	5. 55	6. 01	6. 07	6. 13
October - -	6. 19	6. 25	6. 31	6. 36	6. 42	6. 48	6. 54	7. 00	7. 02	7. 11
November -	7. 16	7. 23	7. 29	7. 34	7. 39	7. 44	7. 48	7. 50	7. 59	8. 00
December -	8. 03	8. 05	8. 08	8. 10	8. 11	8. 42	8. 13	8. 13	8. 12	8. 01

To know the Sun's setting, you need only subtract the rising from 12. For instance, the Sun rises January 2, at nine minutes after 8, which, subtracted from 12, there remains 3 hours, 51 minutes, which is the time of the Sun's setting, viz. 51 minutes after 3 in the afternoon. To find the length of the day, double the setting; for the length of the night, double the rising.

A

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